World Health Organization
India

WHO's Role in Multisectoral Response to Noncommunicable Diseases in India

Evaluation Report

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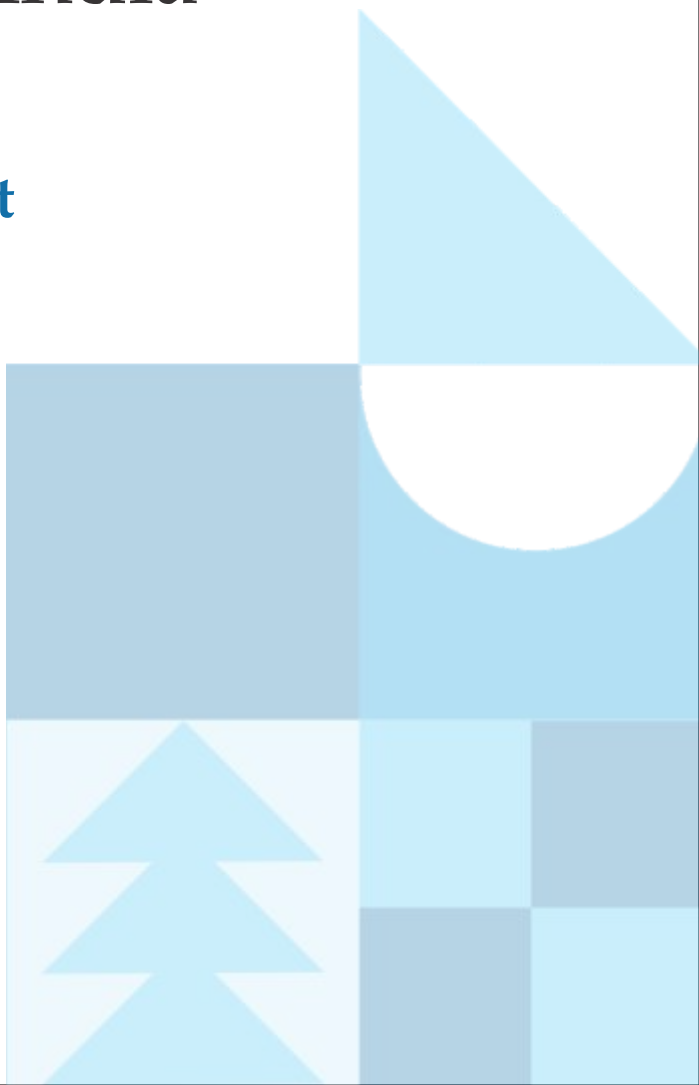

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Cover picture: Pinkathon, Guwahati 2

LIST OF ABBREVIATIONS

ACS	:	American Cancer Society
AFTP	:	Advocacy Forum on Tobacco Control
AHWC	:	AYUSH Health and Wellness Centres
AIIMS	:	All India Institute of Medical Science
AMRIT	:	Affordable Medicines and Reasonable Implants for Treatment
AMRUT	:	Atal Mission for Rejuvenation and Urban Transformation
ANM	:	Auxiliary Nurse Midwifery
APL	:	Above the poverty line
AQ	:	Air Quality
ASHA	:	Accredited Social Health Activist
AYUSH	:	Ayurvedic, Yoga and Naturopathy, Unani, Siddha and Homeopathy
BCC	:	Behaviour Change Communication
BMGF	:	Bill and Melinda Gates Foundation
BMI	:	Body Mass Index
CBAC	:	Community based Assessment Checklist
CBSE	:	Central Board for Secondary Education
CD	:	Communicable Diseases
CDP	:	Crop Diversification Programme
CERC	:	Consumer Education & Research Centre
CHC	:	Community Health Centre
CHIS	:	Comprehensive Health Insurance Scheme
CMNNDs	:	Communicable, Maternal, Neonatal, and Nutritional Diseases
CNC	:	Central NCD Cell
COPD	:	Chronic Obstructive Pulmonary Disease
COTPA	:	Cigarettes and Other Tobacco Products Act.
CRD	:	Chronic Respiratory Disease
CRISIL	:	Credit Rating Information Services of India Limited
CSE	:	Centre for Science and Environment
CSI	:	Civil Society Initiative
CSO	:	Civil Society Organisation
CSR	:	Civil Society Responsibility
CVD	:	Cardiovascular Disease

DGHS	:	Directorate General for Health Services
DH	:	District Hospital
DMHP	:	District Mental health Programme
DTCC	:	District Tobacco Control Cell
ENDS	:	Electronic Nicotine Delivery System
FBD	:	Food Borne Disease
FCA	:	Framework Convention Alliance for Tobacco Control
FCTC	:	Framework Convention on Tobacco Control
FCV	:	Flue Cured Virginia tobacco
FRU	:	First Referral Unit
FSSAI	:	Food Safety and Standards Authority of India
GCM	:	Global Coordination Mechanism on Prevention and Control of NCDs
GDP	:	Gross domestic products (
GoI	:	Government of India
HFSS	:	High Fat Sugar & Salt
HH	:	Household
HIA	:	Health Impact Assessment
HIV	:	Human Immunodeficiency Virus
HLSC	:	Health Sciences Learning Centre
HMIS	:	Health Monitoring Information System
HOT	:	Health-Oriented Telecommunications
HRD	:	Human Resource Development
HRIDAY	:	Health Related Information Dissemination Amongst Youth
HWCs	:	Health and Wellness Centres
ICMR	:	Indian Council of Medical Research
IDSP	:	Integrated Disease Surveillance Program
IEC	:	Information Education & Communication
IHIP	:	Integrated Health Information Platform
IHIS	:	Integrated Health Information Systems
IHME	:	Institute for Health Metrics and Evaluation
IM	:	Institute of Management
JNU	:	Jawaharlal Nehru University
JPIEGO	:	Johns Hopkins Program for International Education in Gynaecology and Obstetrics
JSS	:	Jan Swasthya Sahyog

KAP	:	Knowledge Aptitude Practice
MCCF	:	Medical Care Collections Fund
mCessation	:	Mobile(m) Cessation
MCH	:	Mother, Child Healthcare
MDS	:	Master of Dental Surgery
MEM	:	Multiple endocrine neoplasia
MIS	:	Monitoring Information System
MOEFCC	:	Ministry of Environment, Forest and Climate Change
MOHFW	:	Ministry of Health and Family Welfare
MoHUA	:	Ministry of Housing and Urban Affairs
MoI&B	:	Ministry of Information & Broadcasting
MoLE	:	Ministry of Labour and Employment
MORTH	:	Ministry of Road Transport and Highways (India)
MOs	:	Medical Officers
MoSJE	:	Ministry of Social Justice & Empowerment
MOT	:	Ministry of Transport
MoWCD	:	Ministry of Women and Child Development
MoYA&S	:	Ministry for Youth Affairs and Sports
MPWs	:	Multi-Purpose Health Workers
MSM	:	Multi stakeholder Mechanism
MSP	:	Minimum Support Price
MT	:	Master Trainer
NACO	:	National Aids Control Organization
NACP	:	National AIDS Control Programme
NCAP	:	National Clean Air Programme
NCCP	:	Non-cardiac chest pain
NCD	:	Non-Communicable Disease
NCDC	:	National Centre for Disease Control
NCDIR	:	National Centre for Disease Informatics and Research
NCRP	:	National Clinical Reference Panel
NDMA	:	National Disaster Management Authority
NGOs	:	Non-Governmental Organisation
NHM	:	National Health Mission
NHMP	:	National Hospital Management Portal
NHPM	:	National Health Protection Mission

NHSRC	:	National Health System Resource Centre
NICPR	:	National Institute of Cancer prevention and research
NIHFW	:	National Institute of Health and Family Welfare
NITI	:	National Institution for Transforming India
NLEP	:	National Leprosy Eradication Programme
NMAP	:	National Multisectoral Action Plan
NMHP	:	National Mental Health Program
NMT	:	Non-Motorised Transport
NNMS	:	National Non-communicable Disease Monitoring Survey
NOHP	:	National Oral Health Programme
NPCDCS	:	National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke
NPDCS	:	National Programme for Prevention and Control of Diabetes, Cardiovascular Diseases and Stroke
NPHCE	:	National Programme for Health Care of Elderly
NPPC	:	National Programme for Palliative care
NPSP	:	National Public Health Surveillance Program
NRHM	:	National Rural Health Mission
NTCC	:	National Tobacco Control Cell
NTCP	:	National Tobacco Control Programme
NTTL	:	National Tobacco Testing Laboratory
NUHM	:	National Urban Health Mission
NVBDCP	:	National Vector Borne Disease Control Programme
OPD	:	Out-Patient Department
PBCR	:	Population Based Cancer Registry
PBS	:	Pharmaceutical Benefits Scheme
PFHIS	:	Publicly Funded Health Insurance Schemes
PGIMER	:	Postgraduate Institute of Medical Education and Research
PHC	:	Primary Health Centre
PHFI	:	Public Health Foundation of India
PM	:	Prime Minister
PMFBY	:	Pradhan Mantri Fasal Bima Yojana
PMJAY	:	Pradhan Mantri Jan Arogya Yojana
PMJSY	:	Pradhan Mantri Suraksha Bima Yojana
PMO	:	Prime Minster Office

PMO's	:	Project management office
PMU	:	Project management Unit
PPP	:	Public Private Partnership
PRIs	:	Panchayati Raj Institutions
RNTCP	:	Revised National Tuberculosis Control Program
RSBY	:	Rashtriya Swasthya Bima Yojana
SC	:	Scheduled Castes
SDG	:	Sustainable Development Goal
SDMA	:	State Disaster Management Agency
SEARO	:	WHO South-East Asia Regional Office
SECC	:	Socio Economic Caste Census
SEZ	:	Special Economic Zone
SHG	:	Self-help group
SHRC	:	State Health Resource Centre
SSB	:	Service Selection Board
STCCs	:	Short-term Rural Cooperative Credit Structure
SWOT	:	Strength, Weakness, Opportunity and Threat
TAGs	:	Technical Advisory Group
TB	:	Tuberculosis
TCC	:	Tobacco Cessation Clinic
TCCC	:	Tertiary Cancer Care Centre
UHC	:	Urban Health Centre
UNCED	:	United Nations Conference on Environment and Development
UNCT	:	United Nations Country Team
UNDP	:	United Nations Development Project
UNFPA	:	United Nations Population Fund
UNIATF	:	United Nations Interagency Task Force
UNICEF	:	United Nations International Children's Emergency Fund
UNSDF	:	United Nations Sustainable Development Framework
UT	:	Union Territory
VHAI	:	Voluntary Health Association of India
VHSNCs	:	Village Health , Sanitation and Nutrition committee
WHA	:	World Health Assembly
YMCA	:	Young Men's Christian Association

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EXECUTIVE SUMMARY

A. BACKGROUND

The global burden of noncommunicable diseases (NCDs) has increased tremendously. In 2016, NCDs claimed 71% (41 million) of the world's 57 million deaths, 15 million of which were premature (age 30 to 70 years). Low- and middle-income countries bear the greatest burden of NCDs (78% of all NCD deaths and 85% of all premature deaths).

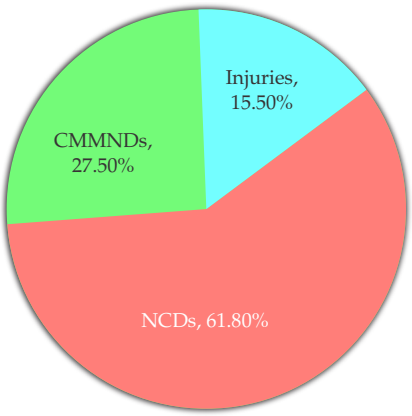
World Health Organization (WHO)'s recent 5 x 5 matrix on NCDs includes five diseases: cardiovascular disease (CVD), chronic respiratory disease, cancer, diabetes and mental and neurological conditions; and five behavioural risks: unhealthy diet, tobacco use, harmful alcohol use, physical inactivity and air pollution. WHO advocates globally with countries to control the above diseases and risk factors, and has created a Global Action Plan on the same. Sustainable Development Goal (SDG) 3 on health also contains seven targets related to NCDs.

B. INDIAN SCENARIO ON NCDS

India is passing through an epidemiological transition. Between 1990 and 2016, the burden of deaths due to communicable, maternal, neonatal and nutritional diseases (CMNNDs) reduced from 53.6% to 27.5% (Fig. 1).

At the same time, the burden of deaths due to NCDs went up from 37.9% to 61.8%, resulting in the following:

Fig. 1. Deaths from various diseases in India



- CVD deaths have almost doubled since 1990
- Persons living with diabetes grew from 26 million in 1990 to 65 million in 2016
- Incidence of all cancers increased by 28% (1990 to 2016). New cases of cancer reached 1.1 million
- Chronic obstructive pulmonary disease (COPD) patient numbers grew from 28 million in 1990 to 55 million in 2016
- One of every four persons suffers from a mental health problem. Suicide deaths increased by 40.1% from 1990 to 2016.

Risk factors

The major risk factor-related facts on the increase in NCD prevalence are as follows:

- More than 1.3 million persons die each year from smoking and use of smokeless tobacco
- Three hundred ninety-two million persons in India are physically inactive
- One hundred and eighty-one men and 126 women per 100 000 are affected by cancers from alcohol
- Thirteen of 20 most polluted cities globally are in India, causing 12.4% of total deaths in 2017
- India has the highest number of road accident-related fatalities (150 785 in 2016)
- One hundred million cases of food-borne diseases are reported every year in India.

Implications

The implications of the above risk factors are as follows:

- CVDs caused 28.1% of deaths in India in 2016
- Cost of treating NCDs is 80–90% of per capita income, pushing 7% of India's population below the poverty line annually
- There is a gross mismatch between public investments on NCDs and the NCD burden
- Health is a state subject, but most states (especially smaller states) lack resources
- Very few centres of excellence on mental health exist despite high prevalence of mental illness
- Stigma on mental health prevents patients from seeking treatment, community integration.

Objectives of this evaluation

This evaluation was commissioned to assess the relevance, organizational effectiveness, sustainability and efficiency of WHO Country Office for India (WCO India)'s contribution towards coordinating a multisectoral response by the Ministry of Health and Family Welfare (MoHFW) to address NCDs. It looked at the contribution of WCO India to the Government of India (GoI) in strengthening four critical areas on NCDs in India – multi-stakeholder responses to NCDs, health systems, health promotion and monitoring and surveillance.

Methodology

Stakeholders

Stakeholders included key Informants from Central and state governments, UN agencies, civil society organizations and their networks, frontline health staff, corporate social responsibility agencies working in health, academics, private sector health actors in NCDs and communities.

The evaluation framework

This consisted of a mix of approaches – results-based management, process tracing and advocacy evaluation.

Evaluation tools used were: documentation review; semi-structured key informant interviews (51); focus groups(10); visits to five states – Chhattisgarh, Mizoram, Odisha, Uttarakhand and Tamil Nadu ;and media analysis from 3940 newspaper stories (randomly selected over 10 months) over the past 5 years to measure change in visibility of NCDs.

Limitations

1. Inability to interview several government stakeholders due to elections 2019
2. Transfers of original officers who conceptualized the National Multisectoral Action Plan (NMAP)
3. Finite opportunity to visit only five states
4. Recent and ongoing programme, policy and process changes
5. Work on NCDs by GoI and WCO India being relatively recent compared to work on tobacco or on communicable diseases.

C. MAJOR FINDINGS OF THIS EVALUATION

The major findings from this evaluation against primary evaluation questions are presented below. We also used a rating scale as follows:

Good work! Well done!

Work in progress! Some areas for improvement!

Needs more efforts and attention!

1. **Role of WHO in promoting multi-stakeholder approaches and learning from the same**

   WCO India built on past work on tobacco control and adopted several strategies for multi-stakeholder action on NCDs:

   - Use WHO global research and policy briefs to inform GoI and other actors in India on NCDs
   - Support research to generate evidence on NCDs, e.g. health impact assessment on mapping policies and potential roles of 13 key ministries in NCDs; supporting GoI for research on health impacts of air pollution, etc.
   - Work closely with various ministries of GoI in formulating the NMAP for NCDs and the National Clean Air Programme (NCAP) through national and state level consultations, interministerial and cabinet meetings, etc.
   - Support the development of policy briefs for relevant ministries to integrate targeted issues in departmental policies
   - Hold discussions with GoI to respond to global conferences and global action plans
   - Support GoI in rolling out national programmes on NCDs, e.g. support readiness assessments of states on NCDs
   - Map and support civil society organizations (CSOs) to play an active role in the design and implementation of multi-stakeholder responses
   - Support global recognition of GoI's efforts, e.g. two UN Interagency Task Force on the Prevention and Control of Noncommunicable Diseases (UNIATF) awards were received by MoHFW in 2019
   - Provide technical support in setting health standards, work with Indian Council of Medical Research (ICMR) and other agencies on NCD monitoring and surveillance.

A comparative analysis of the process learning from past experience in advocacy on tobacco control shows that considerable gains have been achieved by WCO India in promoting multi-stakeholder mechanisms for NMAP, NCAP and road safety. Nevertheless, considerable efforts are still needed, especially to secure the buy-in of non-health stakeholders for ensuring "whole-of-Government" and "whole-of-society" integration in prevention and control of NCDs.

2. **Multi-stakeholder collaboration across Government and national and sub-national levels**

   WCO India has taken many initiatives to support GoI on NCDs. These include support for formulating the NMAP, developing the NCAP, formulating the National Mental Health Plan and advocacy on road safety. Details of each of these processes are listed in the main text. GoI also runs the following programmes on NCDs in which WCO India provides technical support: (i) National Programme for Prevention and Control of Cancers, Diabetes, Cardiovascular Diseases and Stroke; (ii) National Noncommunicable Disease Monitoring Survey; and (iii) National Mental Health Programme.

3. **Support for evidence generation by WCO India for best buys and their implementation**

   Following are the main results of WCO India's support for evidence generation and implementation on various "best buys":

   - **Reduce tobacco use**. After many years of efforts by tobacco control cells, results seem to be showing now. The Global Adult Tobacco Surveys indicate a decline in the prevalence of tobacco use (34.6% among adults in 2009–10 to 28.6% in 2016). The

Agriculture Department has also launched a scheme supporting tobacco farmers to move to alternate crops.

- **Reduce the harmful use of alcohol**. Several alcohol regulations are in place. Ministry of Social Justice and Empowerment (MoSJE) runs a programme on alcohol deaddiction. Nevertheless, considerable efforts are still required, e.g. taxes on alcohol to be raised adequately and imposing a ban on brand stretching/surrogate advertisements on alcohol by Ministry of Information & Broadcasting (MoI&B). There is also no national alcohol prevention policy.
- **Reduce unhealthy diet**. Food Safety and Standards Authority of India (FSSAI) has issued several regulations for food safety and launched the "Eat right India" and "Safe and nutritious food at workplace" campaigns to promote eating healthy food and shun foods that are High in Fat, Salt and Sugar (HFSS foods). Food safety initiatives by other ministries include: exploring restrictions on HFSS food advertising (MoI&B); upcoming revision of National Nutrition Policy; promoting non-HFSS snacks in schools (Ministry of Women and Child Development [MoWCD]); promoting healthy food at the workplace (Ministry of Labour and Employment [MoLE)]; banning advertisements of alcohol, tobacco, unhealthy foods during sports events (Ministry of Youth Affairs and Sports [MoYA&S]); promoting kitchen gardens in schools; integration of healthy food in mid-day meals (Education Department); and promoting organic farming (Ministry of Agriculture). Action on reducing palm oil imports are still awaited.
- **Reduce physical inactivity**. Several ministries have taken up work on enhancing physical activity. National wellness campaigns, e.g. World Yoga Day, Fit India Movement and health & wellness centres under Ayushman Bharat are new initiatives. Ministry of Housing & Urban Affairs (MoHUA) is promoting non-motorized transport and bicycle sharing schemes, cycling and walking tracks and parks. MoYA&S promotes various sports and expanding of playfields. Department of Education is promoting sports into middle school, secondary and university curricula.
- **Manage cardiovascular disease and diabetes**. National Programme for Prevention and Control of Cancer, Diabetes, CVD and Stroke (NPCDCS) runs several programmes on cardiovascular diseases and diabetes. Many good community examples of the same exist, e.g. in Mizoram. The population-based screening of major NCDs is a good initial step, but much remains to be done given that CVDs cause the maximum number of deaths in India and the large numbers affected by diabetes and related complications.
- **Manage cancer**. NPCDCS runs a large programme on cancer treatment. Screening, referring cancer patients at community health centre (CHC)/primary health centre (PHC) levels including through population-based screening for cancers has started. The National Cancer Registry Programme collects data on cancer cases. Yet, much needs to be done, e.g. increasing the number of cancer hospitals. From the earlier 27 regional cancer institutes, GoI has announced 20 new state cancer institutes and 50 tertiary cancer care centres.

4. Support to health promotion, health system strengthening and data and surveillance

a. Health promotion

- **Fiscal and policy measures**. Several ministries have initiated policy and tax measures for health promotion. On the demand side, the Finance Ministry imposes high goods and services tax (GST) on tobacco and sugar-sweetened beverages.

FSSAI has issued guidelines for front-of-pack labelling, other than efforts mentioned in Section 3 above. MoI&B is considering advocating with media to allocate free airtime for health promotion on NCDs, and restricting advertisements of pan masala, HFSS foods and surrogate advertisements for tobacco and alcohol.

On the supply side, public–private partnership (PPP) guidelines for NCD service provision have been launched by NITI Aayog. Department of Agriculture promotes organic farming, but vegetable/fruit farmers do not yet access crop insurance under Pradhan Mantri Fasal Bima Yojana (PMFBY) scheme. Restrictive tax disincentives for demerit goods are not yet in place. MoWCD promotes kitchen gardens, non-HFSS snacks in schools, yoga in anganwadis and schools and healthy lifestyles and nutrition awareness under Food and Nutrition Board. The Education Department will provide coarse grain, high-fibre food in the Mid-day Meal Scheme and educate parents and children about healthy food. MoLE already implements NCD screening for beneficiaries and their families. MOYA&S recently launched the Fit India Movement and will prohibit advertisements for tobacco, alcohol and HFSS foods during sports events. The Ministry of Parliamentary Affairs is targeting awareness on NCDs for parliamentarians.

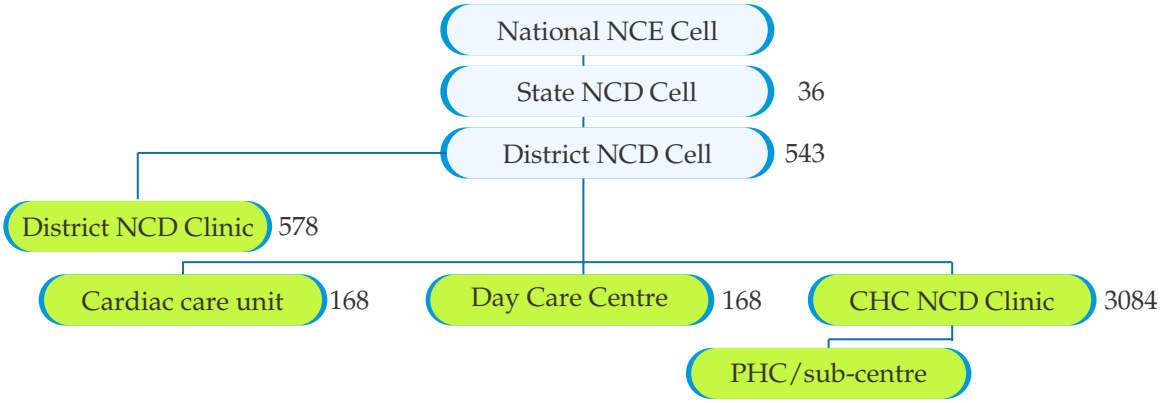
- **Mass media campaigns**. A National Health Portal has been launched containing information on health schemes and links to apps for tobacco cessation, managing diabetes, etc. in addition to the above-mentioned campaigns by FSSAI.
- **Constraints**. Availability of fruits and vegetables at reduced prices is a constraint. Taxes on alcohol and control of surrogate advertisements on alcohol are still awaited, as is a national alcohol policy. State departments face shortage of staff and skills on information, education and communication (IEC) for NCDs. Budgets allocated to H&WCs is inadequate.
- **Media analysis**. A media analysis with newspaper articles over 10 randomly selected months over the past 5 years revealed that the visibility of NCDs, public health services and risk factors has increased significantly over this period. The highest number of articles were related to public health, followed by NCD-related articles. Communicable diseases show a flatter growth and lesser absolute stories compared to those on NCDs and Health Policy. Within NCDs, the fastest increase in stories was seen on mental health, cancer, CVD, lung diseases, diabetes and hypertension, in that order. The most covered risk factor was air pollution followed by tobacco, alcohol and obesity, in that order. Unhealthy food as a risk factor is the least covered. Most of this coverage is spontaneous, and more targeted efforts could ensure that newspapers promote a nudge approach to change behaviour.

b. Health systems

Various interventions at different levels have been initiated for strengthening health systems for NCDs by GoI and state governments, supported by WCO India in various ways.

- **Support for readiness assessment of states on NCDs**. WCO India supports GoI on assessing readiness of states on rolling out NCD-related programmes with Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh.
- **Strengthening existing state-level interventions**. Much of the action on strengthening health systems will be taken at the state level. Currently, all states are setting up an infrastructure to provide NCD services in the form of state and district NCD cells, district and community health centre (CHC) level NCD clinics, cardiac care units and day care centres (Fig. 2).

Fig. 2. State-level structure to provide NCD services



- **National Health Mission (NHM) reports a massive training drive on NCDs for population-based screening**. Capacity-building of medical officers, nurses, accredited social health activists (ASHAs) and auxiliary nurse midwives (ANMs) on NCD is being done through modules designed by National Health Systems Resource Centre (NHSRC) and state human resource centres (SHRCs). By 31 Dec 2018, 1.08 crore (10.8 million) persons had reportedly been screened for diabetes, hypertension and three major cancers – oral, breast and cervical. Tamil Nadu has also started an awareness drive with some initial PHC patients on a patient peer-group basis.
- **Strengthening NCD services at district level**. Interventions on NCDs have now been integrated into the NHM, with clear instructions to medical officers on the package of services to be provided at sub-centre, PHC, CHC/first referral unit (FRU), district hospital, medical college and tertiary cancer centre levels.
- **Integrating NCDs into medical education**. Respondents felt that the current medical education in India focuses almost exclusively on diagnosis and treatment of diseases, rather than the preventive aspects. Inclusion of preventive aspects of NCDs in the medical curriculum is an urgent need.
- **Capacity-building to provide NCD services**. WCO India has supported the development of modules for training of trainers (ToTs) on NCDs. It is also planning a training programme on NCDs for medical officers in partnership with United Nations Development Programme (UNDP) and Public Health Foundation of India (PHFI).

Capacity-building of frontline health workers (especially ASHAs and ANMs) will be critical in the coming phase as they will lead the massive population-based screening for NCDs, and will play a key role in ensuring NCDs are integrated into lifestyles at community levels. Several concerns need to be addressed here, the primary ones being the rapid increase of workload for ASHAs of multiple vertical disease-based national programmes; poor orientation of ASHAs about health issues; lack of capacities commensurate with their responsibilities; unclear reimbursement policies; delayed payments of incentives and inadequate handholding and mentoring of ASHAs.

- **A comprehensive package of services through health and wellness centres (H&WCs)**. A set of 12 basic health-care services are to be provided under the comprehensive primary health-care services recently launched by GoI at the 150 000 H&WCs to be set up across the country. However, H&WCs are facing budget constraints.
- **Financial protection of the poor for NCD health care through Ayushman Bharat**: Ayushman Bharat is aimed at covering health-care costs for 100 million of the

poorest households and strengthening H&WCs to provide a comprehensive package of health-care services. Issues that need to be resolved in the same include: adequate budgets; eligibility criteria for beneficiaries; uncovered out-of-pocket expenses; inadequate health infrastructure; overdependence on private hospitals and their associated unregulated costs. Good models of strengthening public health-care systems exist in Kerala and Tamil Nadu that can be learned from.

c. Strengthening monitoring, evaluation and surveillance systems for NCDs

WCO India office has been a critical player in supporting GoI to ensure that good quality data on various diseases (including NCDs) are collected. Some recent examples are given below.

- **National NCD monitoring survey**. This survey is being conducted in 300 urban and 300 rural primary sampling units by ICMR and National Centre for Disease Informatics and Research (NCDIR) with the support of MoHFW and will cover the 10 targets and 21 indicators of the National NCD Monitoring Framework. Data on NCD risk factors, i.e. tobacco consumption (smokeless and smoking), harmful intake of alcohol, dietary habits, dietary salt intake, physical measurements, physical activities, fasting blood sugar and blood pressure will be collected.
- **Population-based screening (PBS) for common NCDs**. This screening is being rolled out in 24 016 sub-centres across 219 districts. ASHAs conduct the screening using the Community Based Assessment Checklist under the NHM. Some states are integrating PBS data with PHC and facility-based data to move towards an electronic medical record database. Dell, Tata Trusts (with technical support from WCO India) have supported developing the software.
- **Health Management Information System (HMIS)**. WCO India supported MoHFW to roll out an HMIS and Integrated Health Information Platform to track data on communicable diseases and NCDs on one platform. Dissemination will be done through the new HMIS website.

5. Work by WCO India with UN partners, CSOs and academia

During formulation of NMAP, WCO India established links with 13 target ministries. Further, during work on NCAP, this number has expanded. Thus, WCO India has expanded relations with MoHFW and non-health ministries.

Among UN agencies, WCO India worked mainly with UNDP, UNFPA and UNICEF on NCDs. WCO India forged links with UNDP India (through the Inter-agency Task Force on NCDs) to support MoHFW on NMAP. UNDP India will be supporting MoHFW in coordination on the NMAP, while WHO will be providing technical support and working closely with Directorate General of Health Services (DGHS).

The CSO mapping led by WCO India indicates four to five broad areas where CSOs play a role in NCDs: awareness; capacity-building; advocacy; access to health-care services for hard-to-reach, high-risk groups; monitoring and reporting the ground situation about implemented programmes for greater accountability. WCO India achieved several policy wins by involving CSOs and supporting them for strengthening coalitions, e.g. the Healthy India Alliance's advocacy for increasing GST on sugar-sweetened beverages has helped to change policy on the same.

D. Lessons learnt

SWOT analysis

Strengths in the current NCD scenario

WCO India enjoys an unmatched reputation as the go-to agency on health in India. WHO Global Action Plan on NCDs and SDG 3 are well-accepted frameworks in India. WCO India is a well-respected partner in design and implementation of various national programmes and played a key role in formulation of NMAP, interministerial multi-

stakeholder mechanisms and strengthening data systems for NCDs. It is also seen as an unbiased agency providing forums to multiple stakeholders to come together for action. These factors give WCO India high leverage with the Government, CSOs and health professionals, which it can use very effectively for NCDs.

Weaknesses

a. Integrated and multisectoral coordination

Despite the above critical efforts, the efficiency of implementation of the multi-stakeholder responses could be significantly enhanced. Key bottlenecks are reported below.

- **Inadequate joint ownership**. Some ministries see NCD as a MoHFW issue; others have conflicting priorities.
- **Inadequate joint accountability**. Respondents suggest that for better accountability, a higher authority, e.g. NITI Aayog could monitor progress by non-health ministries.
- **Emphasis on NCD service delivery, less on coordination**. Currently, MoHFW is grappling with service delivery of NCDs, while coordination and advocacy with other ministries envisaged under NMAP is still a work in progress.
- **Need to enhance engagement of elected representatives**. Parliamentary (Central) and departmental standing committees (in states) are critical forums for advocacy, e.g. Parliamentary Committee on H & FW has advocated strongly for higher finances and urgent action on NCDs.
- **Lack of dedicated resources for coordination**. At Centre/states, resources for coordination function for NCDs, e.g. for NMAP are scarce, though critical. The WHO–UNDP support for coordination for NMAP has been welcomed.
- **Integration of non-health CSOs**. Such integration into multi-stakeholder mechanisms is urgently required for NCDs.
- **Poor donor funding**. NCDs received only 1.7% of global 37.6 billion US dollars in developmental assistance in 2016.

b. Health promotion

- Current health promotion systems are targeted at promoting communicable, maternal and neonatal diseases and NCDs are a relatively new priority for the health system.
- On both demand and supply sides, much promotion is still needed for "best buys". Some ministries have expressed constraints and differing priorities from NCDs.
- Health promotion centres such as National Institute of Health and Family Welfare (NIHFW) and State IEC departments report resource and skill shortages.
- Rapid behavioural change towards increased consumption of HFSS foods, lack of physical activity and prevalence of other risk factors on NCDs are still major concerns.
- Many CSOs and CSR organisations work in the health and non-health sector, but often in isolation; most are not part of policy design and implementation.

c. Health systems strengthening

- Most gaps in the overall health systems also plague NCDs: low overall health budgets coupled with under-utilization; very high out-of-pocket expenses for poor and poor insurance; mismatch between NCD incidence and budget; lack of infrastructure and trained personnel; predominant public preference for private treatment; emphasis on curative rather than preventive health, etc.
- Health is a state subject with states expected to contribute part of the expenditure for Central schemes. However, many states (especially the smaller ones) lack resources to meet their health targets. Thus, health infrastructure is weak in most states, e.g. several states do not have a single state cancer institute/tertiary care cancer centre (TCCC).
- Training superstructure (module design, ToTs, scheduling and targeting of training) for health staff on NCDs is still being developed. Frontline workers report being overburdened with numerous types of

training on different vertical disease-based programmes. Systems for handholding and mentoring of frontline workers are weak.

- Monitoring of training is another gap in ensuring uniform coverage of trainees. Also, training outcomes in behaviour change of trainees are inadequately tracked.
- Doctors not trained for management are burdened with management duties rather than health care. The health system needs strong and professional management on NCDs.

d. Surveillance, monitoring, evaluation and research

- Multiple data systems which do not "talk" to each other, non-reliability of data and non-use of data for decision-making at the point of data collection have been key systemic constraints.
- Monitoring of training, especially of outcomes, is weak. WCO India's recent support in developing the Integrated Health Information System has helped.
- Data on the at-risk population has started being collected through population-based screening. However, research on localized and contextualized evidence of patterns of risk factors and causation for NCD is needed.
- National data systems, e.g. Census, do not yet collect data on risk-related behaviour.
- Community-based monitoring system for NCDs has not been yet been developed.

Opportunities for NCDs in India

Critical learning from tobacco control, air pollution, HIV/AIDS and other programmes is available on making multi-stakeholder responses work. GoI has also recently initiated significant interventions towards universal health coverage and health promotion, e.g. comprehensive primary health care, PMJSY, Ayushman Bharat, Yoga Day, Fit India, Eat Right India, H&WCs, jan aushadhi kendras, AYUSH, etc. These reinforce WCO India's efforts on NCDs. Most non-health ministries are also supportive of their role in NMAP. Despite vacancies and shortages, a vast infrastructure in public health exists in India. A largely supportive policy framework for promoting healthy behaviour on NCDs is also available. NITI Aayog has developed a ranking system on health for the states of India. It may also be a suitable agency to enhance upward accountability to NMAP.

Also, as mentioned above, WCO India is supporting GoI in strengthening multi-disease data systems, and WCO India, Dell and Tata Trusts have developed NCD screening software with backward integration with larger data systems. The population-based screening on NCDs and subsequent referrals is also an opportunity to create a movement on NCDs with communities. WCO India is also working closely with CSOs. Many CSOs, CSRs and states have demonstrated innovative scalable models on NCDs. Moreover, significant interest in the media on disease prevention already exists and there is an increasing trend of media visibility on NCDs. These opportunities can be made to work positively to promote work on NCDs.

Qualitative analysis of the interviews during this evaluation shows a largely positive sentiment towards work done by WCO India.

Threats in the area of NCDs

India's health system faces the dual challeng of responding to a reduced but still considerable burden from communicable, maternal and nutritional diseases while at the same time responding to the rising NCD incidence. In the absence of adequate resources, both these areas are likely to suffer. NCDs are also more difficult to address because of their slow, invisible nature, linkages with cultural and behavioural aspects and difficulty in changing behaviour, despite knowledge. The numbers and capacities of medical personnel also need to be rapidly increased without compromising on the quality of instruction. The above constraints will require the best of innovative thinking and considerable resources, the latter being a critical constraint today.

E. Recommendations

Recommendations that emerge from this evaluation for strengthening WCO India's work on NCDs are enumerated below.

1. **Widen WCO India's current targeting and partnership strategy on NCDs**. This should include more partners such as: elected representatives; non-health CSOs and CSO coalitions; community-level CSO-led support structures for NCDs; organizations promoting awareness on NCDs such as mass appeal organizations, mainstream and vernacular media and corporate communication agencies; health awareness campaigns; information stakeholders such as CSR units of IT giants; and actors producing micro-learning videos and games, etc.

2. **Continue supporting GoI and state governments for strengthening health management systems for NCDs**. This is needed especially to enhance professional management of health systems; strengthening data systems for NCDs through linking vertical non-talking data sets; and a comprehensive data assessment for NCDs.

3. **Continue supporting GoI and state governments to strengthen capacity-building processes for NCDs**. This can be done through assessing and enhancing current training methods on NCDs for greater retention; supporting institutionalization of incentives for capacity development of staff by linking capacity-building to promotions and other incentives; refresher training for medical officers on NCDs; strengthening capacity-building of frontline workers through more holistic training and monitoring knowledge and practice outcomes through assessments and refreshers; support strengthening handholding and mentoring systems for frontline health workers; enhance focus on NCDs in the medical curricula; and enhance capacities among state health departments on NCD-related IEC design.

4. **Support and undertake advocacy in multiple areas on NCDs**. Examples are: greater donor and Government funding for NCDs; greater understanding among non-health ministries on the multisectoral nature of interventions required for NCDs; enhanced involvement of elected representatives at national, state and panchayat levels to prioritize NCDs; advocate for the NMAP actors to report to a higher body, e.g. NITI Aayog for joint ownership and accountability; and advocate within the UN system for a Joint United Nations Programme on HIV/AIDS (UNAIDS) kind of modality on NCDs for greater focus and resources.

5. **Explore areas for supporting further research on NCDs**. Several areas for research were identified during this evaluation, which WCO India could explore supporting. These were: risk factors and NCD causality in low body mass index (BMI), high physical activity, poor nutrition individuals; support GoI to assess the efficacy of newly launched and existing programmes on health outcomes for NCDs; a research framework for utilizing population-based screening data for projections to help nuanced prioritization of interventions; review WHO's global experience on NCDs for interventions that can be scaled up in India; and explore the role of AYUSH for preventive health care.

A OVERVIEW OF THE NCD ISSUE

A.1. WHO's Global and Regional Mandate for NCD

Global Situation: The 2018 Noncommunicable diseases country profile by WHO presents the following global situation on NCDs:

"The global NCD burden remains unacceptably high. In 2016, NCDs were responsible for 41 million of the world's 57 million deaths (71%). 15 million of these deaths were premature (30 to 70 years). Burden is greatest within low- and middle- income countries, where 78% of all NCD deaths and 85% of premature deaths occurred. Additionally, in 2016, suicide was responsible for almost 800,000 deaths.

Risk of premature death from one of the four main NCDs has declined to 18% in 2016, a modest relative reduction of 6% from 2010. Low- and middle-income countries accounted for 78% of all NCD deaths and 85% of premature adult NCD deaths worldwide, with the risk of dying from an NCD being double that for an adult in a high-income country. By implementing all 16 of the WHO "best buys" in all 194 Member States, a total of 9.6 million premature deaths could be avoided by 2025".

Non-communicable diseases (NCDs) and risk factors included in the WHO latest 5 X 5 matrix are:

Diseases: Cardiovascular diseases (CVD), chronic respiratory diseases (CRD), diabetes and cancers, mental and neurological conditions.

Behavioural Risks: Unhealthy diet; tobacco, alcohol and drug use; inadequate physical activity

Environmental risks: Outdoor and Indoor Air pollution

Metabolic risks: Raised blood pressure; high fasting plasma glucose; high total cholesterol; high Body Mass Index (obesity).

We use the above definition of NCDs and risks in this evaluation.

WHO has taken up a number of initiatives globally on NCDs. These include the 2003 Global Strategy for prevention and control of NCDS, Adoption of WHO Framework Convention on Tobacco Control (FCTC) in the same year, 2004 Global strategy on Diet, physical activity and Health at World Health Assembly, 2008-13 Action Plan on NCDs, 2010 UNGA resolution on NCDs, 2011 Moscow Ministerial meeting on healthy lifestyles & NCD 2011; 9 voluntary Global NCD targets adopted in 2013 ; Joint UN Inter-Agency Task Force (UNIATF) visit to India in 2014, and inclusion of NCD Targets into SDGs in 2015. These attempts were provided political support at the highest level in nation states by the High Level Meetings on NCDs in 2011, 2014 and 2018.

A.2. NCDs and SDGs

The Millennium Development Goals did not contain a specific mention of NCDs but they are now included in the Sustainable Development Goals. (See Box 1 below). Both the SDGs and WHO's Global Action Plan provide specific goals and targets, among others the reduction of premature mortality from NCDs by one-third by the year 2030.

Box 1: NCD-related targets in SDG 3

SDG 3: Ensure healthy lives and promote well-being for all at all ages

Target 3.4 By 2030, reduce by one third premature mortality from NCDs and promote mental health and well-being

Target 3.5 Strengthen the prevention and treatment of substance abuse, including harmful use of alcohol

Target 3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents

Target 3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all

Target 3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination

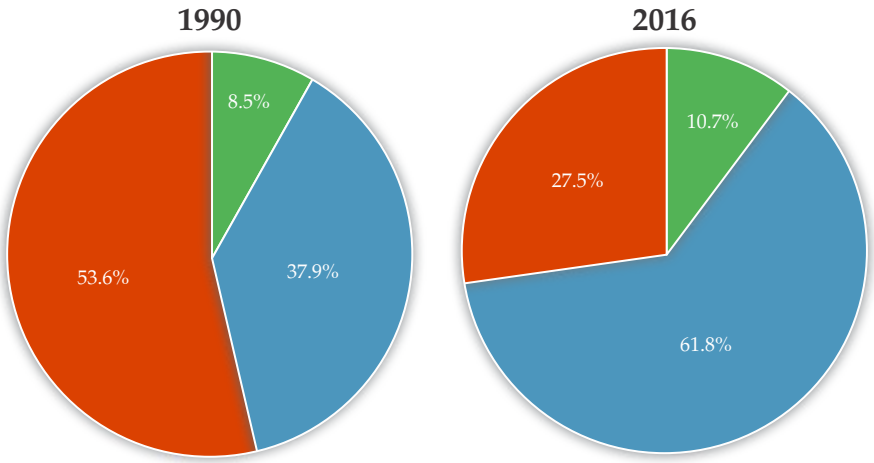
Target 3.a Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate

Target 3.b Support the research and development of vaccines and medicines for the…NCDs that primarily affect developing countries

A.3. National Situation on NCDs in India

The India: Health of the Nation's States report, 2016 found that India is going through a major epidemiological transition. In 1990, the communicable, maternal, neonatal, and nutritional diseases (CMNNDs) had constituted the major causes for mortality at 53.6% while NCDs contributed 37.9%. Thereafter, various interventions in the health sector ensured a lower mortality due to CMNNDs. By 2016, while the proportion of CMNNDs had gone down to 27.5% of total mortality, the proportion of Non-communicable diseases (NCDs) and injuries has increased to 61.8%. (Figure 3 below). In absolute terms, cardiovascular diseases, respiratory diseases, cancer and diabetes killed around 5.8 million Indians in 2016 alone. Most of these deaths are premature, as they occur in age group 30–70 years.

Figure 3: Contribution of major disease groups to total deaths in India, 1990 and 2016



A.3.1. Disease-wise mortality

The breakdown of disease-wise mortality in 2016 is shown in Figure 4 below. The leading individual cause of death in India in 2016 was ischaemic heart disease, at 132 deaths per 100,000, more than twice that of the next leading cause – chronic obstructive pulmonary disease (COPD) at 64 deaths per 100,000. The other NCDs in the top 10 individual causes of death included - Diarrhoeal diseases (59); Stroke (53); Lower respiratory infections (38); Tuberculosis (33); Diabetes (23); Road injuries (19); Chronic kidney disease (18) and Suicide (18)10.9%. There were wide variations in death rates from the leading causes between the states.

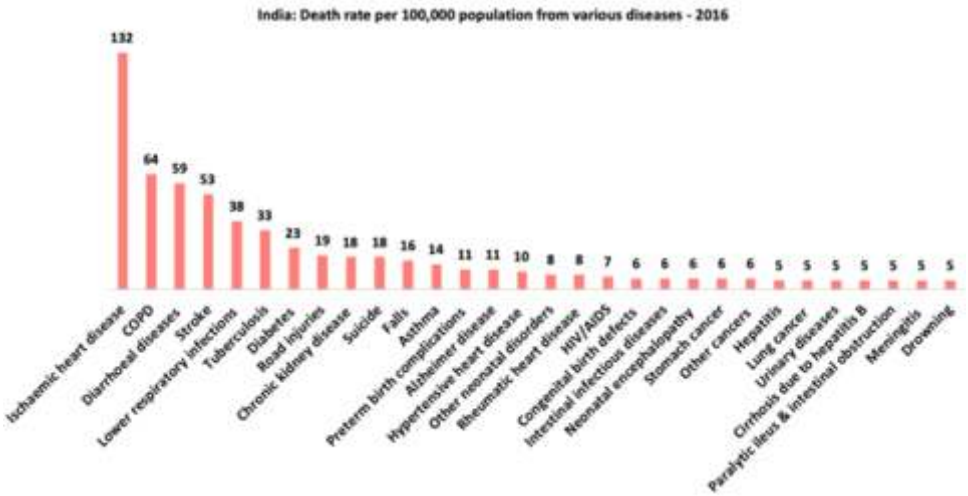
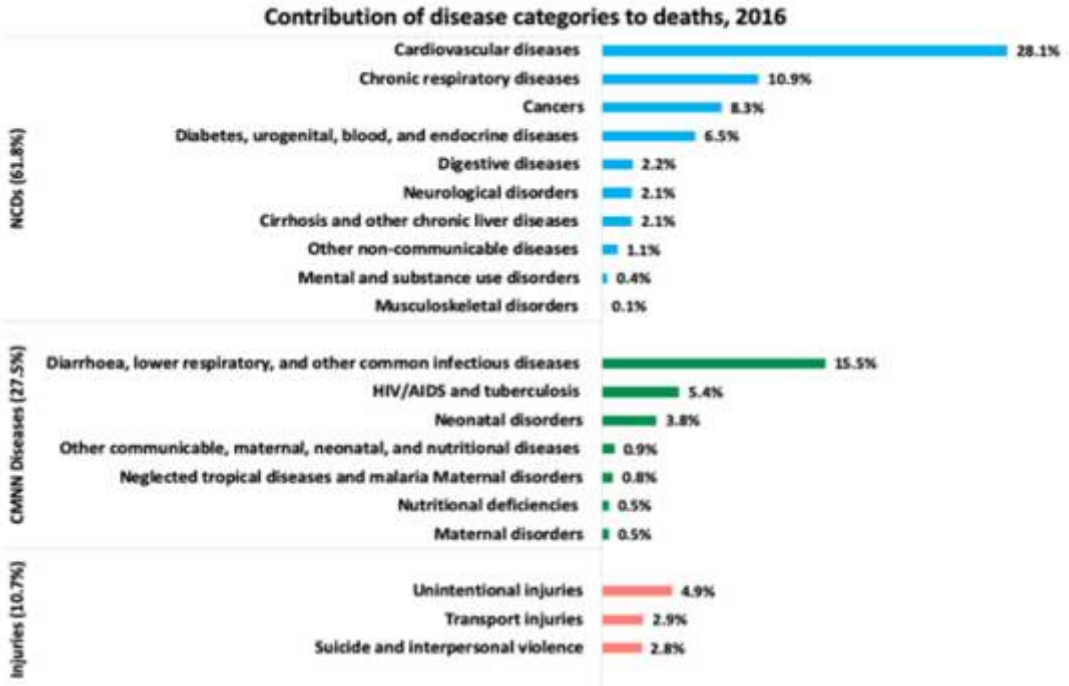


Figure 5 on next page shows the breakdown of above into NCDs, CMMNDs and Injuries.

A.3.2. Major risk factors of NCDs in India

a. Widespread prevalence of Tobacco use

India contains 267 Million tobacco users (28.6% of the population), making it the second largest consumer of tobacco after China. More than 1.3 million are estimated to die due to tobacco in India annually. Out of these, one million are attributed to tobacco smoking and the rest to smokeless tobacco use. India accounts for half of all oral cancers globally, exceeding that of lung cancer. India also has the highest burden of both tuberculosis (TB) and Multi- Drug Resistant (MDR) TB. Smoking increases the risk of TB by more than two-and-a-half times. Moreover, smoking also contributes in a major way to India's increasing burden of non-communicable diseases. MoHFW estimates that if current trends continue, tobacco will account for 13 percent of all deaths in India by 2020.



b. Decreasing Physical Inactivity

The WHO recommends that individuals perform at least 150 minutes of moderate to vigorous physical activity per week. However, a study on physical inactivity in India showed that about 392 million individuals are inactive in India. This implies a huge population at risk for developing diabetes and other non-communicable diseases. Indeed, insufficient physical activity and unhealthy diets have emerged as two of the most important modifiable risk factors for type 2 diabetes, and other NCDs like cardiovascular disease. Moreover, the study found that over 90% of the population do no recreational physical activity at all, facilities and awareness for which need to be increased urgently.

c. Increase in Air Pollution related diseases

The WHO Ambient Air Pollution Database found that 13 of the top 20 most polluted cities in the world are in India, with highly alarming levels of PM2.5 and PM10 levels from both ambient and indoor air pollution. In 2016, 140 M people in India were exposed to air pollution levels 10 times that of WHO safe limits. A Lancet Study found that:

"1.24 million deaths in India in 2017, which were 12.5% of the total deaths, were attributable to air pollution, including 0.67 million from ambient particulate matter pollution and 0.48 million (0.39–0.58) from household air pollution. Of these deaths attributable to air pollution, 51.4% were in people younger than 70 years. India

contributed 18.1% of the global population but had 26.2% of the global air pollution DALYs in 2017".

d. Very High Road Accident Fatalities

India tops the list of countries globally with 150,785 road accident fatalities from 5 lakh road accidents in year 2016 . Comparatively, China reported 58,022 road accidental fatalities and Brazil 38,651 fatalities in the same year. Interestingly, while India has about 2% of motor vehicles globally, it reports more than 11% of global road traffic deaths. Alarmingly, in year 2016, 46.3% of the road accidents victims came from age group 18 to 35 years while 68.6% came from the age group of 18 to 45 years. Several unaddressed causes of road accidents lead to this high fatality rate.

e. Drastic increase in alcohol abuse

51.1 men per 100,000 population and 27.1 women per 100,000 population suffered from liver cirrhosis linked to alcohol abuse globally. Cancers associated with alcohol abuse resulted in 181 men per 100,000 population and 126.4 women per 100,000 population. The Global status report on alcohol and health 2018 , the per capita alcohol consumption in India doubled between 2005 and 2016. Indians consumed 2.4 litres of alcohol per capita in 2005, which increased to 4.3 litres in 2010 and scaled up to 5.7 litres in 2016. This high consumption is linked to increased risk to various diseases.

f. Poor food safety

Food Borne Diseases (FBD) (commonly referred to as food poisoning) burden in India are estimated to create about 100 million cases per year (about 1 in 12 people), through various diarrhoeal, infectious, parasitic and chemical agents. FBD outbreaks, together with acute diarrhoeal diseases, constitute nearly half of all reported outbreaks of diseases in India. The incidence of FBDs is higher in places where food is cooked in bulk, such as canteens, hostels and wedding venues .

A.3.3. Implications of NCDs in India

a Rising mortality die to Cardio-vascular Diseases

A study funded by ICMR and BMGF found that cardiovascular diseases contributed 28.1% of the total deaths and 14.1% of the total DALYs (disability-adjusted life-years) in India in 2016, compared with 15.2% and 6.9%, respectively in 1990. In 2016, there was a nine times increase between states in the DALY rate for ischaemic heart disease, a six times increase for stroke, and a four times increase for rheumatic heart disease compared to 1990. 23.8 million prevalent cases of ischaemic heart disease were estimated in India in 2016, and 6.5 million prevalent cases of stroke, a 2.3 times increase in both disorders from 1990, attributed to several risk factors for CVD.

b. Burden of treatment on poor

In India, the poor face an increasing burden of NCDs, which can thus no longer be considered as "diseases of the rich." Poverty is aggravated among NCD patients due to the high costs of treating chronic diseases. Research shows that the proportion of hospital stays due to NCDs increased almost three-fold in past 10 years, and a single hospital stay for cancer or heart disease from private facilities would account for 80% and 90% of per capita income. The cost of treating NCDs was about 40% of household expenditure, financed through distress measures (e.g. borrowing, sales of assets) pushing 7% of India's population below poverty line every year due to costs of medical treatment. GoI has recently launched Ayushman Bharat scheme, to cover medical expenses of 100 million poor families, to address the above issue.

c. Inadequate public investments and infrastructure

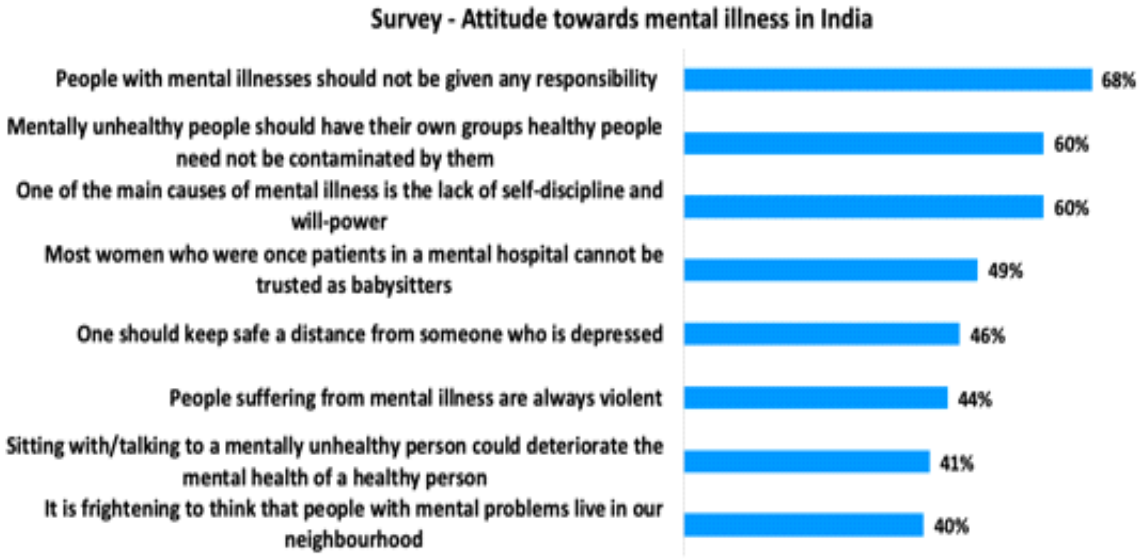
There is a gross mis-match between public investments on NCDs compared to increase in NCD burden. Consequently, compared to the world average of 4 beds per 1,000 people, India has just over 0.9 hospital beds per 1,000 people. Also, out of 11,262 sanctioned posts for specialists at CHCs, 7,359 (65.34%) are lying vacant; out of 2,657 posts for Surgeons at CHCs, 1,811 (68.16%) are lying vacant; out of 34,068 posts for doctors at PHC, 8,774 (25.75%) are lying vacant15.

d. Resource Crunch in the States for NCDs

Another critical issue is that Health is a State subject in India, but many States (esp. small states) lack resources for Health Systems or Health Promotion on NCDs, despite Central Government assistance of 40% for large and 90% for North-eastern states in some schemes. For e.g. several States do not have even a single State Cancer Institute/ TCCC, despite the 1.1 Million new cancer cases annually (2016 figures). Most states are under double (communicable and non-communicable diseases) or triple burden (Communicable, noncommunicable and injury or nutrition related diseases). WHO guidelines and the NMAP framework provide a basic structure for achieving NCD targets, but a strong variation among states in the underlying social determinants necessitate a tailor-made strategy for each state.

e. Alarming situation on Mental health

The National Mental Health Survey in 12 States found that prevalence of mental disorders (including common & severe disorders, alcohol and substance use disorders (excluding tobacco use disorder)) in adults over 18 years of age is 10.6%. Depression and anxiety related disorders prevail at 14 %. 1 in every 4 individual suffers from a mental health problem in their lifetime. Also, suicide was the 9th leading cause of death in 2016. Despite having 18% of global population, India accounts for 36.6% of global suicide deaths in women and 24.3% in men (2016). There is also a severe lack of mental health care professionals, mainly because of limited number of post graduate seats in psychiatry in medical colleges . The country has only 21 Centres of Excellence in mental health. Mental health patients also suffer strong stigma from society, preventing them from getting treatment and integrating into communities. Figure 6 below from a National Survey shows how India perceived Mental Health . (Annex 9 for an overview of issues in Mental Health in India).



The above scenario is the context in which this evaluation is placed. Forthcoming sections present the evaluation framework and the findings.

B EVALUATION FRAMEWORK

B.1. Context of this evaluation

WHO's goal is to build a better, healthier future for people all over the world. WHO works side by side with governments and other partners to ensure the highest attainable level of health for all people.

In 2011, Heads of Government adopted the Political Declaration of the High-level meeting on the Prevention and Control of NCDs during the United Nations General Assembly. In the same year, India adopted the WHO Global Action Plan for prevention and control of NCDs 2013-2020 and developed national targets and monitoring framework. In response to the growing burden of NCDs, and reiterating India's commitment towards UNGA Political Declaration, the MoHFW initiated a process to develop a National Multisectoral Action Plan (NMAP) for prevention and control of common NCDs. The action plan offers a road map and menu of policy options to guide multisectoral efforts, since most of the actions for attaining the NCD targets lie beyond the purview of health sector. The National Multisectoral Action Plan for prevention and control of NCDs rests on four pillars- the multisectoral coordination, health systems strengthening, health promotion and monitoring, evaluation and surveillance. The National Health Policy, 2017 also recognizes the growing burden of NCDs and articulates the need for inter-sectoral actions as a measure for optimal health outcomes.

Responding to the need for multisectoral approach for tackling NCDs, WHO Country Office for India supports MoHFW in contextualization of global evidence for prevention and control of NCDs. WHO India supported sub-national consultations with multiple stakeholders for inputs for development of the NMAP, as well as multisectoral consultations at national level with stakeholder departments and Ministries, fiscal and non-fiscal measures for risk mitigation, assessment and capacity building for health system strengthening, use of innovative technology for health promotion and technical assistance in the surveillance for NCDs, among others.

Additionally, there are various other multisectoral platforms/ activities being implemented in the area of NCDs where WHO has also had a major role to play – e.g. on Air Pollution, road safety, mental health, etc.

This evaluation was therefore commissioned to document the support provided by WHO India to MoHFW in articulating a multisectoral response for prevention and control of NCDs. The evaluation process reviewed the process, the outcomes, lessons learned, and challenges in the role WHO played and provides recommendations for subsequent scale up and adaptation in other areas of multisectoral collaboration.

B.2. Objectives of this Evaluation

Overall objective

Assess the relevance, organizational effectiveness, sustainability and efficiency of WHO India's contribution in coordinating a multisectoral response by the MoHFW to address NCDs

Specific Objectives

- Review the various multi-stakeholder platforms in the area of NCDs prevention and control at the national level
- Assess the contribution of WHO India in conceptualizing, the national multisectoral response to NCDs in India.
- Determine the advocacy, leadership and coordination role of WHO India across government sectors, civil society, UN Agencies, Academic and Research Institutions, private sector, etc. in the process of NMAP development.
- Identify value added by WHO India in the health system strengthening, health promotion and monitoring for NCDs
- Determine effectiveness, efficiency and sustainability of the multisectoral coordination for NCDs prevention,
- Identify a few best practices and early actions taken by WHO India towards early implementation of NMAP
- Outline key research studies undertaken by WHO India to support policy actions for NCDs
- Identify main challenges, innovations and lessons involved in the process

B.3. Our approach to this evaluation

Our approach to this evaluation has been guided by the standard norms followed by the UN Evaluation Group in answering the following questions:

Are we doing the right thing?	Examine the rationale, the justification of the undertaking, makes a reality check and looks at the satisfaction of intended beneficiaries.
Are we doing it in the right way?	Assess the effectiveness of achieving expected results. It examines the efficiency of the use of inputs to yield results.
Are there better ways of achieving the intended results?	Look at alternative ways of working, good practices and lessons learned.

B.4. Key Stakeholders of this evaluation

Following are the main target stakeholders of the evaluation:

Table 1: Key Stakeholders in the Evaluation

Actors	Details
UN Agencies	WHO India, UNDP India, UNFPA India, UNICEF India
Central Government	MoHFW- esp. National NCD Cell, 39 Ministries and Departments identified in the NMAP, GoI organisations such as ICMR, NIHFW, NHSRC, FSSAI, etc.
State Government	Health Departments at State level, esp. the State NCD Cell, State Tobacco Control Cells, State Health Resource Centres, State Health Training Institutes, Mental Health Institutions, etc.
CSOs	CSOs and their Coalitions – e.g. Healthy India Alliance, Voluntary Health Association of India, PHFI, Jan Swasthya Sahyog, etc.
Health Frontline Staff	ANMs, ASHA, Medical Officers, etc.
CSR Agencies in Health	Various CSR agencies working ion Health -e.g. Piramal Swasthya Foundation, etc.
Academics	Health Policy and Advocacy Experts – Monash University, Australia; The George Institute for Global Health
Private Health Actors in NCDS	Private sector institutions – e.g. Fortis Cancer Institute, etc., Service providers, Pharma sector companies, etc.
Communities	Communities and patients and their associations

The specific organisations and individuals interviewed were chosen in consultation between the evaluators and WHO staff, to ensure coherence and adequate coverage of all stakeholders and issues. Annex 4 gives a list of all the Institutions visited and 51 Individuals interviewed.

B.5. The Evaluation Design

The evaluation was a mix of Summative and Formative approaches. Where possible and available, the evaluation used the data coming in from Program MEL systems and partner/ WHO reports and publications. Additionally, the evaluation was conducted in non-experimental design using multiple tools, informants and locations to ensure triangulation and validity of findings.

B.6. Theoretical Framework for the Evaluation

Considering the complex and multi-layer nature of the evaluation, the evaluating team used the following theoretical frameworks to work around the above limitations:

B.6.1. Results Based Management and Evaluation Frameworks of UNEG and OECD-DAC

The evaluation framework followed by UNEG lists specific evaluation criteria standardised by OECD-DAC:

Criteria	Details
Relevance	The extent to which aid activity is suited to priorities, policies of target group, recipient and donor.
Effectiveness	A measure of the extent to which an aid activity attains its objectives.
Efficiency	Efficiency measures the outputs -- qualitative and quantitative -- in relation to inputs.
Impact	Positive and negative changes produced, directly/ indirectly, intended/ unintended.
Sustainability	Whether benefits of an activity are likely to continue after donor funding has been withdrawn.

Progress against each of these criteria was assessed through a triangulation approach (using multiple information tools, informants and geographical areas) to arrive at a coherent picture. Learnings from secondary reports (e.g. monitoring reports from programme and from civil society), opinion of experts from various spheres and discussions with national and sub-national stakeholders were collated to arrive at answers to the evaluation questions.

B.6.2. Process Tracing Framework

Another evaluation framework found useful to assess multi-layered, advocacy and influencing interventions is the Process Tracing Methodology (Box 2 below).

Box 2– Process Tracing Approach

Step 1: Establish/ locate a program Theory of Change

Step 2: Work with stakeholders to identify/ confirm not more than three intermediate outcomes achieved by the project

Step 3: Systematically document and assess the interventions made to achieve the above outcomes through program reports and discussions with stakeholders

Step 4: Identify and evidence which targeted outcomes and related outputs have been achieved

Step 5: Undertake "process induction" to identify salient plausible causal explanations for these outcomes

Step 6: Gather data for process verification to assess how available data supports causal explanations in step 5

Step 7: Write a narrative analytical report to document research process and findings

Step 8: Allocate contribution scores (ratings) to various outcomes based on –

(a) Extent to which outcomes have materialised and

(b) Contribution of current project to this change

B.6.3. Advocacy Evaluation Framework

Evaluation of Advocacy interventions has emerged as a specialised evaluation field. Our use of the latest methods in this field was informed by two specific approaches –

(a) The Annie E. Casey Foundation's pioneering work on Advocacy Evaluation Frameworks.

(b) The work done by Centre for Evaluation Innovation on Advocacy Strategy Formulation.

Based on above, the major outcome areas to be evaluated are given in Table 2 below.

Change expected from Advocacy	Details
1. Shift in social norms on health	The knowledge, attitudes, values and behaviours composing the normative structure of culture and society
2. Strengthened organizational capacity	The skillset, staffing, leadership, organizational systems, finances and strategic planning among Government for implementation and among civil society coalitions for advocacy
3. Strengthened alliances	Coordination, collaboration and alignment among Government, civil society partners, including non-traditional alliances
4. Strengthened base of support	The breadth, depth and influence of support among the general public, interest groups and opinion leaders
5. Improved policies	Stages of change in public policy - policy development, proposal, demonstration of support, adoption, funding implementation
6. Changes in Impact	Long-term changes in social and physical lives/ conditions motivating policy change efforts, e.g. changes in individuals, populations, environments

We have tried to integrate all the above three frameworks while designing the evaluation tools.

B.7. The Evaluation Instruments

The following methods were used to arrive at the conclusions:

B.7.1. Documentation Review

Documentation provided by WHO India and partners were reviewed including:

- National, international WHO publications; policy briefs
- Central (CNC, MOHFW) and State Govt. Action reports
- Government publications and websites
- Health Systems Impact Assessment reports
- Reports of consultations and meetings organized between WHO India and partners
- Media news, reports and editorials
- Relevant research in Medical Journals and forums

Evaluation Instruments used

- Documentation Review
- Key Informant Interviews
- Focus Groups
- State Visits
- Media Analysis

- Analytical reports of demand, supply side interventions
- Reports of NCD work done in other countries
- Global and international Health Policy Advocacy Reports

The detailed Bibliography for this evaluation is given at the end of this document.

B.7.2. Key Informant Interviews

A detailed matrix of the Key Informants who would respond to each evaluation question was prepared and semi-structured interviews conducted with 51 respondents. Interviewees included:

- WHO India and State staff
- Government: NCD Cell in MOHFW, Relevant Ministries, State Government Staff
- Academics: Health Policy and Advocacy Experts
- CSO Coalitions, Health Advocacy NGOs e.g. PHFI, VHAI, etc.
- Other Health Sector stakeholders: Health promotion agencies, NIHFW, SHRC, Medical practitioners, mHealth technology experts

Annex 4 gives a detailed list of individuals interviewed and agencies visited.

B.7.3. Focus Groups

Focus Group Discussions were held with the following:

CSO Coalition members – 2 ; State Health Dept. staff – 5; CSO staff – 3

B.7.4. Visits to Five States

To understand NCDs issues at State level (Health being a State subject), the team visited five States -

South - Tamil Nadu; North – Uttarakhand; Central – Chhattisgarh; North East – Mizoram; East - Odisha

The visits covered mainly discussions with State Health department Officials and CSO Alliances in the State Capitals. We also visited PHC in Chennai to understand first-hand Population based screening activities.

B.7.5. Media Analysis

In order to assess the general increase in visibility in Indian society on NCDs, it was decided to analyse newspaper stories occurring on health and non-health issues, and trace whether the proportion of stories on NCDs were increasing. This increased visibility was seen as a possible proxy of increase in awareness among the readers of Hindi and English newspapers in the country.

Newspaper stories were requested from Service Provider for 10 months selected randomly over the period Jan 2014 to Dec 2018 (10 out of 60 months). The service provider (Press Monitor) tracks 25 English and Hindi newspapers every day. Based on a list of related keywords, Press Monitor extracted all health and non-health stories on all days in these 25 newspapers for selected months and made them available to the evaluators. A total of 19,701 unique articles were received from Press Monitor. Since it was impossible to analyse these articles in such a short time, a random sample of every fifth of these articles was selected resulting in 3,940 unique stories. The detailed findings of the Media Analysis are presented in Annex 5.

B.7.6. Case Studies

Based on the key experiences emerging from all the above methods, case studies on specific areas of interest capture learnings from the evaluation and are presented in Boxes and Annexes to this report.

B.8. Limitations faced during this evaluation

1. Inability to reach out to a large number of Government Stakeholders due to the announcement of 2019 elections, and the initiation of election code of conduct.
2. Transfers or retirement of officers who had conceived the NMAP and other multi-stakeholder initiatives, leading to a loss of institutional memory.
3. Finite opportunity to conduct site visits to not more than 5 states due to limitations of budget and time.
4. Recent and ongoing programme, policy and process changes during the evaluation period.
5. WHO India and Government of India's work on NCDs being more recent compared to its work on tobacco or communicable diseases, thus limiting the scale of evaluable achievements at the State and District level.

B.9. Key Evaluation Questions vs Tools

Following are the KEY evaluation questions that guided the entire evaluation process, marked against the Evaluation Tools that we used:

Table 3: Key Evaluation Questions

Evaluation Questions vs Instruments	Document Review	Informant Interviews	Focus Groups	Field Visits	Media Analysis
1. Was the WHO India Office's response to the NMAP relevant to India's needs and consistent with the Organization's mandate?	✓	✓			
2. How did WHO India foster multi-sectoral collaboration across government sectors and at different levels of administration (national, sub-national, etc.)	✓	✓	✓	✓	✓
3. How did the WHO India Office support in evidence generation for best buys and their implementation	✓	✓			✓
4. What have been the main results of the WHO India Office's contributions to the achievement of the Multisectoral response to NCD prevention and control including health system strengthening and health promotion	✓	✓	✓	✓	
5. How did the WHO India work with other agencies like UN partners, civil society, academic and research organizations to support the achievement of NMAP	✓	✓	✓	✓	✓
6. What are the main lessons learned to take into account for the WHO's engagement?	✓		✓	✓	

C MAJOR FINDINGS FROM THE EVALUATION

Following are the major findings from the evaluation against each evaluation question. While answering each of the above questions, we also give a traffic light indication of the results achieved on the question as follows:

Good Work! Well Done!

Work in Progress! Some areas for improvement!

Needs more efforts and attention!

C.1. Question 1 : Relevance of response of WHO India

Was the response of the WHO India Office to the NMAP relevant to India's needs and consistent with the Organization's mandate?

Good Progress. Well Done!

Reason for rating: WHO India office has been widely applauded by various actors both in the Government of India as well as in CSOs. Their painstaking work in operationalising the Global Action Plan on NCDs, getting various stakeholders on board for the conceptualisation of the National NCD Monitoring Framework and the National Multi-stakeholder Action Plan on NCDs in India has been appreciated. Similarly, CSO networks have valued WHO's role in building their capacities and in ensuring CSO participation in national research and policy forums.

Background

The WHO Independent High-Level Commission on Noncommunicable Diseases identified the following challenges in implementation of multi-stakeholder programmes on NCDs by nation states globally:

1. Lack of political will, commitment, capacity, action
2. Lack of policies and plans for NCDs
3. Difficulty in priority-setting
4. Impact of economic, commercial, and market factors
5. Insufficient technical and operational capacity
6. Insufficient (domestic and international) financing to scale up national NCD responses
7. Lack of accountability

Keeping the above challenges in mind, evidence from this evaluation tells us that WHO India has undertaken a wide range of initiatives and efforts to strengthen Multi-stakeholder action on NCDs:

C.1.1. Research and evidence generation for multi-stakeholder action on NCDs

The formulation of NMAP design was preceded by considerable investment by WHO India Office into research and evidence generation as preparation for the formulation of NMAP:

- Wide dissemination of WHO Global process documents
- Commissioned Health Impact Assessments covering 13 key Ministries which helped conceptualising the major advocacy points per Ministry for the NMAP.
- Supported GoI with draft Policy Briefs for the above target Ministries
- Supported wide ranging and multi-stakeholder consultations with Government, Academia and CSOs, notably in the following processes for inputs into formulation of NMAP:

2011	WHO-GoI New Delhi Call to Action Workshop to combat NCDs
2013	GoI formulation the National NCD Monitoring Framework
2013	Launch of the Comprehensive Mental Health Action Plan 2013-2020.
2013	Sub-national consultations for National Action Plan on NCDs in India
2014	Consultations during Joint Mission of UN Inter Agency Task Force on NCDs to India
2016	Inter-Ministerial consultation and Agreement on NMAP in India
2016	National NCD Conference in India; State Commitments on NCDs are finalised
2016	First National Consultation of CSOs on NCD
2017	Second National Consultation of CSOs on NCD

C.1.2. Working closely with Government of India in formulating the NMAP

WHO has been working with the Government of India on NCDs for quite some time. For e.g. the work done by WHO India on Tobacco control has already been well recognised. WHO's work on NCDs got a push after the WHO Global Action Plan on NCDs was launched in 2013. WHO India Office, in consultation with various stakeholders (e.g. Ministry of Health and Family Welfare and CSO Coalitions) took following steps culminating in the formulation of the NMAP:

1.2.1. Discussions with GoI to respond to Global Conferences and Global Action Plans

WHO India team has participated, sometimes informally, in supporting GoI in responding to Global Processes – e.g. preparations for the World Health Assembly, preparation for the High Level Political Forum, etc. Few UN agencies enjoy the close relationship that WHO India enjoys with its Government counterparts.

1.2.2. Supporting GoI in conducting a readiness assessment of States on NCDs

According to MoHFW officials, the next step in implementing the NMAP is conducting a readiness assessment of the States on NCDS. With this in mind, the MoHFW with WHO India and PGIMER, Chandigarh, is conducting a review of the preparedness of various states in implementing the activities envisaged under the NMAP.

1.2.3. Mapping, supporting CSOs to play active role in design & implementation of multi-stakeholder responses

Civil Society organisations in India have been at the forefront of advocacy on health issues for many decades – e.g. they played a strong role in advocating for action against tobacco consumption and promotion, often being in an adversarial position with tobacco companies. WHO India's role in building capacities, providing evidence and ensuring CSOs' inclusion is policy forums has been recognised by all Civil Society groups interviewed.

"WHO India has worked very closely with our network – The Healthy India Alliance – and has played a key role in supporting the following activities on NCDs in India:

- *Acted as an honest convenor between actors from diverse ideological views*
- *Mapping of CSOs to identify potential actors and building their capacity on NCDs*
- *Providing access to critical global and national documents*
- *Support for strengthening CSO Networks – e.g. Healthy India Alliance and AFTP, India and for organising consultations*
- *Supporting CSOs to generate evidence on NCDs– esp. on behavioural and adoption practices – e.g. on e-cigarettes*
- *Support to participating in National Surveys such as the Global Adult Tobacco Survey in India*
- *Supporting awareness raising of youth and school children on correct behaviour to prevent NCDs – e.g. in Tobacco*
- *Ensuring that CSO voices are represented in all major national and global policy consultations such as missions of UNIATF, national and State consultations in the formulation process of NMAP, etc." ~ Healthy India Alliance*

1.2.4. Ensuring that the work done by Government of India on NCDs gets a global recognition

WHO India helped the good initiatives on NCDs by MoHFW to gain a global recognition through the UNIATF awards. In 2018, MoHFW received awards in two categories – Outstanding Ministries of Health and Outstanding Individuals in Ministries of Health - Mr. Manoj Jhalani, Additional Secretary and Mission Director (NHM, MoHFW) for their outstanding work on prevention and control of NCDs.

1.2.5. Setting health standards and support for data systems and monitoring NCDs with MoHFW, ICMR, etc.

WHO India has provided technical support to MoHFW, ICMR, PGIMER, NCDC and other agencies to help streamline the data, monitoring and surveillance systems on NCDs. Most recent examples of such support are the National Non-communicable Disease Monitoring Survey, Population based screening for NCDs, Health Management Information Systems and the Integrated Disease Surveillance Programme.

C.1.3. Process Learnings

a. Process learning from Tobacco control about advocacy for NCDs

Tobacco Control took many years to arrive at the advanced stage of adoption which we see today. The advocacy process for tobacco control presents several learnings for future advocacy in NCDs (See Table 4 below).

Table 4: Comparative Analysis of factors for success of multi-stakeholder mechanisms on Tobacco and NCDs

Criteria	Tobacco Control	NCDs
Issues clearly framed and agreed upon	Risk factors, disease profiles, burden of disease clearly outlined and assimilated into government systems	Risk factors outlined, burden of disease still known at preliminary level, most NCDs are silent killers - that is they are not detected until the disease is at an advanced stage. Screening and response is at early stage of assimilation and is at different levels in different states
Joint ownership among multiple stakeholders	Ministries of HRD, I & B, Home, Labour, Railways and Finance have been fully involved. Involvement of Ministry of Agriculture, Rural Development and Environment, Forest and Climate Change for establishing alternate livelihoods of tobacco farmers is in progress.	NMAP envisages role of 39 Ministries and Departments, primarily of 12 of which are seen as critical. However, since NMAP is recently launched, and with elections and recent political changes, coordination is still at initial stages.
Joint accountability, esp. to a higher authority	All stakeholders at National level reported to Sec'y MoHFW, but the "Tobacco is only a Health Issue" thinking was changed through long years of training and awareness raising. Same at State and District level.	Similar structure as NTCC, but the "NCD is only a Health issue" thinking is still very strong. Needs training, awareness raising and support for coordination at NCD Cell level. Some respondents suggest that the accountability of the NMAP stakeholders should be to PMO or NITI Aayog for greater accountability.
Each stakeholder's role and targets clearly defined and accepted	Roles defined, accepted and put into practice.	Roles clearly defined by NMAP. However, adoption of roles is still in progress, as most Ministries and Departments (including MOHFW) see NCDs as primarily a health issue, and are not fully on board towards a Whole of Government or Whole of Society action.

Concrete behavioural changes defined and adoptedv	Behaviour changes defined and mostly adopted	Behaviour change among patients mostly defined, but behaviour change among Govt. stakeholders still in process. E.g. Higher GST rates on demerit goods is still work in progress; Availability of fruits and vegetables at affordable prices still inadequate.
National, sub-national implementing structure	National Tobacco Control Cell established at MoHFW and operational for many years	National NCD Cell established at MoHFW. State Cells also exist in all states; District cells fully operational in a 543 districts.
	State and District Tobacco Control Cells operational in all States and Districts for many years	State NCD Cells just set up in all States but still lack staff and budgets; District NCD Cells have been set up in 543 Districts
Political will and support	Parliament, Judiciary and Civil Society have all put their weight behind Tobacco Control for many years	Involvement of Parliamentarians is in initial stages, no judicial action yet, and involvement of civil society, though initiated, still at a preliminary stage
Financial support for the issue	Budget for Tobacco Control has been substantial over the years	Poor financial support available for MSM on NCDs at State and Central level, and Govt. and CSO levels, not even from donors
CSOs ensure accountability	CSOs have been spearheading a large movement on Tobacco Control for years	CSO movement on NCD is till at initial stage, integration with non-health CSOs -critical for advocacy on NCD - still in formative stages
Research institutions generate evidence for policy change	Research and Evidence available at a large scale	Research and Evidence on risk factors available, but some areas for further research exist. Also, in the absence of comprehensive population based screening, data on actual incidence of various NCDs is still work in progress.
Enabling global, national and state policy frameworks	WHO Framework Convention on Tobacco Control was adopted in 2003 and ratified by GoI in 2004.	Global Coordination Mechanism on the Prevention and Control of Noncommunicable Diseases in Nov 2018 was the last global event on NCDs. No Framework convention yet.

National and State Laws and policy measures exist for promoting healthy behaviour	Indian Parliament passed COTPA in 2003, Examples of other interventions- - Prohibit selling tobacco to minors and around schools - Restrictions: tobacco images in films and TV - Display of pictorial health-warning labels - Ban smokeless tobacco products - e.g. gutka - Some states, cities, villages declared their jurisdictions as smoke-free and tobacco-free	The scope of legislation required for NCDs is huge, given the scope of the NCD issue. A few national policies have been recently adopted (e.g. National Mental Health Policy). Some policies do not exist yet (E.g. no National Alcohol control policy yet).
Changes in prevalence	GATS Surveys show that the prevalence of tobacco use in India has fallen from 34.1% to 28.6% between 2009-10 (GATS Survey 1) and 2016-17(GATS Survey 2).	Contribution of cardiovascular diseases to total deaths has almost doubled since 1990. The number of Indians living with diabetes has grown from 26 million in 1990 to 65 million in 2016. The incidence of all cancers increased by 28% between 1990 and 2016, with new cancer cases reaching 1.1 million. Cases of chronic obstructive pulmonary disease have risen from 28 million (1990) to 55 million (2016). The country is also in the grip of a mental health emergency.

b. Inclusion of other suggested stakeholders

Most stakeholders agree that the process for formulation of NMAP has been quite inclusive. Respondents also suggest that several innovations by CSR actors and CSOs in the Health sector could also be included. The MoHFW has a separate website devoted to capturing innovations in State and Central Government departments (some of which are on NCDs). WHO India could set up a system to capture such innovations coming from different parts of India and support piloting and scaling up the same in other areas. Some examples of such innovations that came up during this evaluation were:

- **Piramal Swasthya:** Telemedicine centres - Himachal ; Hand-held device based screening of NCD cases and referrals to mobile medical units stationed near villages in A.P.; Building integrated patient databases on NCDs on patient records, hospital records, etc. (Accessible Medical Record via Integrated Technology – AMRIT)
- **Ekam Foundation:** Mentoring and refresher trainings of PHC, CHC nurses through a cadre of Mentor Nurse; Systematisation of Special New-born Care Units in Chhattisgarh
- **Jan Swasthya Sahyog, Chhattisgarh:** Rural health delivery, wellness centres, patient peer groups
- **Tamil Nadu NCD Cell:** Mobile-based NCD screening with ASHA and SHG members linked to a central database
- Mizoram Tobacco Cell - Tobacco squads
- St. John's Research Institute in Bangalore - Building capacities of nurses in NCDs

- Seva Rural, Gujarat - rural health delivery
- Health department, Gujarat - Certificate based promotions for health staff
- Dr. Mohan's Diabetes Academy, Chennai
- Tata Memorial Cancer Hospital, Mumbai Cancer awareness and screening
- The Banyan Tree, Chennai: Rehabilitation model of mental health patients
- PRS India and Centre for Legislative Research and Advocacy - Evidence based Advocacy with Parliamentarians
- SHRC Chhattisgarh: Indoor air pollution monitoring in Korba
- CSO groups in Mizoram: Groups on support for Cancer, Diabetes and Tobacco Squads

Another suggestion offered by respondents was to build networks between CSOs working in Health and those not working in health so that NCDs could be addressed more holistically.

"We know that much of NCD work will need to happen outside the health sector. WHO could support building stronger and more multi-dimensional civil society platforms. We need to get CSOs from different sectors - not just health but also e.g. agriculture, climate change, sports, pollution, etc. working together. These CSOs can be encouraged to engage with CSOs from other sectoral areas and learn from each other, so that a change in mindsets happens along with cross-learning". ~ Dr. Srinath Reddy, PHFI

C.2. Question 2. Effectiveness of WHO India in fostering multi-stakeholder collaboration

How did WHO India foster multi-sectoral collaboration across government sectors and at different levels of administration (national, sub-national, etc.) ?

Needs more efforts and attention!

Reason for rating:

Caveats – a) It is still early in the work on advocacy on NCDs in India

b) MSMs work only when there is joint ownership of objectives, joint accountability of goals, and necessary human and financial resources.

A number of initiatives have been taken by WHO India to support GoI on NCDs. These include support to formulating the NMAP, for developing the National Clean Air Programme, for formulation of the National Mental Health Plan and for long advocacy on Road Safety. Despite above critical initiatives, the efficiency of implementation of these multi-stakeholder responses – esp. the NMAP- could be significantly enhanced. Key bottlenecks are reported to be the perception among non-Health Ministries / Departments that NCD is a Health Ministry issue, inadequate joint ownership and accountability to a higher authority, inadequate budgets for NCD work and a lack of resources for coordination on implementing the NMAP within MoHFW and in other Ministries.

The new WHO-UNDP initiative to strengthen coordination for NMAP has been much appreciated.

C.2.1. Steps taken for supporting Multi-stakeholder response on NCDs

Various steps have been taken for building multi-stakeholder mechanisms on NCDs by GoI, in which WHO India played a key supportive and technical role. Following are some of the major areas of support by WHO India:

a. WHO India's role in formulation of NMAP

Step 1: Consultations to arrive at a National NCD Monitoring Framework

WHO India supported a series of consultations with the MoHFW and various Medical Research experts in Jan 2013, leading to conceptualisation of a National NCD Monitoring Framework by GoI. The framework contained 9 voluntary targets suggested by WHO Global Action Plan. GoI also included a 10th target on household indoor air pollution. An indicator framework to track progress on these targets was also agreed upon. Thereby, India became the first country in the world to develop a national NCD monitoring framework. (Table 5 below).

Table 5: The National NCD Monitoring Framework for India

No.	Framework Element	Outcome Targets	2020	2025
1.	Premature mortality from NCDs	Relative reduction in overall mortality from cardiovascular disease, cancer, diabetes, or chronic respiratory disease	10%	25%
2.	Alcohol use	Relative reduction in alcohol use	5%	10%
3.	Obesity and diabetes	Halt the rise in obesity and diabetes prevalence	No mid-term target set	Halt rise in obesity & diabetes prevalence
4.	Physical inactivity	Relative reduction in prevalence of insufficient physical activity	5%	10%
5.	Raised blood pressure	Relative reduction in prevalence of raised blood pressure	10%	25%
6.	Salt/ sodium intake	Relative reduction in mean population intake of salt, to achieve recommended level of less than 5 grams per day	20%	30%
7.	Tobacco use	Relative reduction in prevalence of current tobacco use	15%	30%
8.	Household indoor air pollution	Relative reduction in household use of solid fuels as a primary source of energy for cooking	25%	50%
9.	Drug therapy to prevent heart attacks and strokes	Eligible people receiving drug therapy and counselling (incl. glycaemic control) to prevent heart attacks, strokes	30%	50%
10.	Essential NCD medicines and basic technologies to treat major NCDs	Availability & affordability of quality, safe, efficacious essential NCD medicines including generics, and basic technologies in both public and private facilities	60%	80%

Step 2: Sub national Consultations: From Dec 2013 –Jan 2014, WHO India supported GoI to conduct three sub-national consultations for identifying strategies for achieving the above targets. National Steering Group finalised the recommendations.

Step 3: Multi-stakeholder consultations to draft NMAP Strategies: In May 2014, WHO India conducted consultations to draft NMAP strategies were outlined with Ministries, State Govt, CSO, private sector, development partners.

Step 4: Health Impact Assessment Study: In end Aug 2014, to outline the various policies and programmes critical for multi-stakeholder programmes on NCDs, WHO India commissioned Health Impact analyses of 12 key govt. ministries. This analysis identified the specific priority areas where each Ministry could contribute to developing "Health-in-all" policies on NCDs.

Step 5: Inter-ministerial meeting to discuss a coordination mechanism: In Dec 2014, WHO India facilitated participation from 18 Govt. ministries in an Inter-ministerial meeting to discuss various policy options identified in the Health Impact Assessment studies.

Step 6: Drafting of the National Multisectoral Action Plan: From Sep 2015- Jan 2016, the draft Multisectoral Action Plan was circulated to 39 shortlisted Govt. Ministries/ Departments for comments. Joint Secretary level officers were nominated by 34 Departments/ Ministries on NCDS.

Step 7: High level Inter-ministerial meeting on NMAP: In Feb 2016, in a High level Inter-ministerial meeting on NMAP, a consensus was reached on actions identified in NMAP, and coordination mechanisms were discussed and finalised.

Step 8: National NCD Conference: In Jun 2016, a National NCD Conference was organised in which more than 200 delegates with participation from senior officials from States and Union Govt. Discussions and sensitization on NMAP and States commitments was achieved in this conference.

Step 9: Briefing at Cabinet Secretariat: The Action plan was presented in June 2016 to the Cabinet Secretariat to seek guidance on the future road map and to operationalise NMAP

Step 10: Two Inter-ministerial Meetings with priority ministries: From May to Jun 2018, in two Inter-Ministerial Meetings with priority Ministries, a review of the progress done so far on the agreed actions and discussions on finding possible solutions for conflicts were held.

Step 11: Finalising the NMAP: Finally, in Nov 2018, an Inter-ministerial meeting regarding multisectoral action for prevention and control of NCDs was held and the NMAP document agreed upon. Annex 1 presents an overview of actions by various ministries on NMAP. For details of NMAP, see Annex 3.

"Immediately after the global meet, India was the first country to set up a Central team of experts from Ministry of Health and Family Welfare (MoHFW), Indian Council of Medical Research (ICMR), All India Institute of Medical Sciences, and WHO Country office for India, which facilitated the drafting of NMAP".~ (NMAP document, Page 3)

"We appreciate the role of WHO in helping us conceptualise and formulate the NMAP, and to clearly outline the tasks each department needs to do to achieve the plan". ~ MoHFW staff

C.2.2. WHO-UNDP new initiative to support GoI for enhanced coordination on NMAP

MoHFW officials reported that each ministry is busy implementing their own areas of priority and rarely have the dedicated time or resources to coordinate with other ministries and track the implementation of actions under NMAP. With this in mind, WHO and UNDP have initiated a joint programme to support MoHFW and other Ministries in coordination for implementing the NMAP. Consultants will be placed in the Health and other ministries to facilitate coordination. However the programme faces budget constraints, as the issue of NCD is not attractive yet to donors, attracting only 1.7% of global health funding.

C.2.3. WHO India's role in building a multi-stakeholder Response to Air Pollution in India

The WHO global air pollution database has been consistently finding that India had some of the most polluted cities in the world in PM 2.5 and PM10 concentrations, despite a number of interventions by GoI since 1981 .

i. Steering Committee on Air Pollution, 2015

In 2015, responding to this emergency, in Jan 2014 GoI formed a steering Committee on Air Pollution under the Co-Chairmanship of Dr. K Srinath Reddy from PHFI and Prof. Ambuj Sagar from IIT, Delhi. The committee presented the following recommendations:

i.1. Need for a multi-stakeholder response

The Committee felt that "addressing this problem (of Air Pollution) will require a multi-sectoral approach, driven by environment and health data, science, and evidence". It recommended the following actions:

i.2. Reducing Long term exposure

- Shift to very clean sources of household energy such as LPG or advanced biomass stoves
- "Avoid-shift-improve" framework for vehicular pollution – avoid vehicle use, shift to cleaner and mass transport modes and improve technology to ensure fewer emissions per km travelled.
- Control trash burning
- Enforce BEE rate diesel generators in cities
- Dust control regulations and techniques for roads and construction sites
- Phasing out brick kilns near cities and enhancing technology standards of the same
- Stricter enforcement of emission standards and technology for large industrial and power plant standards

i.3. Reducing Episodic pollution

- Controlling sources of episodic pollution such as crop and biomass burning

i.4. Specific recommendations for MoHFW

- Better integration of air pollution and public health policies
- Integrate care pathways into existing national frameworks or programmes (esp. for NCDs)
- Strengthen policy-making capabilities in the area of air pollution and health
- Air pollution data collection and health impacts research
- Capacity building for public health practitioners and health care providers
- Information-dissemination strategies to reduce air-pollution-related health impacts
- Strong and sustained linkages to other actors/programs
- International Linkages and Agenda-Setting (e.g. with WHO)

i.5. Role of Other Ministries and Agencies

The Committee also identified the following stakeholder actors for a multi-stakeholder response to air pollution: Ministries of Agriculture; Communications & Information Technology; Environment, Forests and Climate Change; Finance; Human Resource Development; Information and Broadcasting; Labour and Employment; Law & Justice; New & Renewable Energy; Panchayati Raj; Parliamentary Affairs; Petroleum & Natural Gas; Power; Road Transport and Highways; Rural Development; Urban Development; Women and Child Development; NITI Aayog.

ii. The National Clean Air Programme (2019)

In 2019, the GOI launched the NCAP, a mid-term, five-year action plan with 2019 as the first year aimed at 20-30% reduction of PM2.5 and PM10 concentration by 2024. The programme takes 2017 as the base year for comparison of concentration and may be further extended to a longer time horizon after a mid-term review. The Central Pollution Control Board (CPCB) will execute this programme nation-wide with an initial budget of .300 crore for the first two years.

The NCAP targets 102 non-attainment cities identified by CPCB across 23 states/UTs (these cities have consistently showed poorer air quality than the National Ambient Air Quality Standards). A three-tier system is proposed- a) real-time physical data collection b) data archiving, and c) action trigger system in all 102 cities, besides extensive plantations, research on clean-technologies, landscaping of major arterial roads, and stringent industrial standards.

The approach of NCAP will be multi-sectoral & collaborative, integrating existing policies and programmes of other ministries of GoI – e.g. the National Action Plan on Climate Change; the Smart Cities framework (43 smart cities in the list of 102 non-attainment cities). The NCAP will dynamically evolve based on latest scientific and technical information. In addition, the NCAP will be institutionalized by respective ministries through inter-sectoral groups with the Ministries of Road Transport and Highway, Petroleum and Natural Gas, New and Renewable Energy, Heavy Industry, Housing and Urban Affairs, Agriculture, Health and Family Welfare, NITI Aayog, and experts from industry, academia, and civil society. The program will also partner with multilateral and bilateral international organizations, and philanthropic foundations and leading technical institutions to achieve its outcomes.

An air quality (AQ) monitoring network will be set up across India by adding 4,000 monitors, instead of the existing 101 real-time AQ monitors. The plan also proposes state-level plans of e-mobility in the two-wheeler sector, rapid augmentation of charging infrastructure, stringent implementation of BS-VI norms, boosting public transportation system, and adoption of third-party audits for polluting industries. An apex committee under the Environment Minister, a Steering Committee under the Secretary (MoEFCC) and a monitoring committee under a Joint Secretary will monitor progress. Project monitoring committees will also be set up at state-level with scientists and trained personnel.

iii. Role of WHO India

WHO India has been part of the working groups on Ambient Air Pollution and Household Air Pollution in the Steering Committee above. WHO India also supported National Centre for Disease Control (NCDC) since 2017, when it was put in charge of health hazards of air pollution. Additionally, it also organised a series of consultations on air pollution with MOHFW and NCDC. WHO India also provided technical support and collated a response from the UN in India on Air Pollution, consisting of a 12 point action plan. Similarly, WHO India helped GoI in developing a multi-stakeholder response to air pollution involving various ministries. WHO India also supported and published research on health aspects of air pollution – e.g. WHO's India Assessment Report published in 2018 focuses on indoor household pollution. All the above efforts paved the way for the development of the draft National Clean Air Programme (NCAP). Source:

C.2.4. Multi-stakeholder response to Road Safety in India

Context: Considering the alarming situation of road accident fatalities in India, several interventions by various actors have been taken up in recent years:

i. Supreme Court Committee on Road Safety: In 2014, the Supreme Court of India set up a three-member K S Radhakrishnan panel on road safety in April 2014. The main recommendation of the committee were:

- Ban on the sale of alcohol on highways (both state and national) to restrain drunk driving.
- States were directed to implement laws on wearing helmets.
- States to implement road safety audits to ensure safety standards in design, construction, and maintenance.
- The committee also stressed the importance of creating awareness among people on road safety rules.

ii. NITI Aayog three year Action Agenda: NITI Aayog set the following agenda on Road Safety:

- Strengthen rules governing road safety by passing the Motor Vehicles (Amendment) Bill, 2016.
- Create Road Safety Boards to reduce accidents. Use data to monitor accidents by monitoring accidents in real-time and use this input to direct efforts towards correction on specific points.
- Standardize reporting of accidents and enhance preparedness through better logistics.
- Provisions to rush victims to a nearby medical centre within 10 minutes in an emergency.
- Create supporting infrastructure and economic models to support better safety and efficiency.

iii. Government action: GoI has taken a number of steps in recent years to enhance road safety:

- In 2015, GoI announced new regulations in line with UN standards for front, side-impact, pedestrian protection.
- Ministry of Road Transport and Highways (MoRTH) released 'The Road Accidents in India report' every year starting 2008 . The year 2017 saw 4.65 lakh road accidents that killed 1.48 lakh and injured 4.71 lakh people.
- Pedestrian protection regulation for new models enforced from Oct 2018; will apply to all new cars from Oct 2020.

- MoRTH has announced the observance of 30th Road Safety Week Campaign from 4th to 10th Feb 2019. The theme for this year's campaign was Sadak Suraksha – Jeevan Raksha"
- India signed the Brasilia declaration on road safety, committed to reducing fatalities by 50% by 2020 .

iv. Motor Vehicles (Amendment) Act, 2019: The GoI passed this Act on 9th August 2019 and brought about several sweeping changes such as more stringent driving license procedures; third-party insurance caps removed; a Solatium Fund for victims of hit-and-run accidents; protection of Good Samaritans from civil or criminal liability; greater accountability of contractors, consultants and civic agencies for faulty design, construction or poor maintenance causing accidents; introduction of new mandatory safety features in cars such as airbags and a speed warning device above 80 km/h and almost five times higher fines for traffic violations.

v. Role of WHO India in advocacy for road safety

Legislation: In 2012 WHO conducted a review of existing laws and regulations within the Government of India's Motor Vehicles Act, with a particular focus on drink–driving and motorcycle helmet wearing. Two proposed legislative amendments had been stalled in Parliament –an amendment to the Motor Vehicles Act to increase fines for road traffic violations and address post-crash care, and the other to set up a lead agency for road safety. WHO India focused on advocacy for action by the Government to adopt these recommendations. In Dec 2013 WHO supported hosting of a High-level Meeting on Road Safety to enhance advocacy for the proposed amendments. Increased fines were recently passed by Parliament through the MVA Amendments in 2019 mentioned above in section iv.

Social marketing: WHO produces evidence-based mass media campaigns after extensive research and testing conducted with target audiences. Social marketing campaigns to prevent drink–driving were developed, aired and evaluated in India called Do Not Drink and Drive (2011), Car-O-Bar. Print ads and radio spots were also developed and aired as part of this campaign. The evaluation results showed that 52% of the respondents have seen the campaign, while 75% recognize drink–driving as one of the main causes of road traffic crashes.

Working with the media: WHO India organised series of workshops for media between Nov 2012 and Oct 2013 in Jalandhar, Hyderabad, Visakhapatnam, and New Delhi on general road safety concepts for 155 journalists from print media. All workshops were also preceded by an assessment of media coverage of road safety in general and road safety legislation in particular.

C.2.5. Government Programmes for prevention and control of NCDs

GoI has launched several programmes on NCDs:

Schemes by MoHFW

1. National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS)
   - Tertiary Care Cancer Centre (TCCC) scheme under NPCDCS
   - Population-based Screening of Common NCDs under NHM
2. The National Tobacco Control Programme (NTCP) – section C.1.3.a below
3. National Mental Health Programme (NMHP)
4. National Programme for Health Care of the Elderly (NPHCE)
5. National Oral Health Programme
6. National Programme for Palliative care (NPPC)
7. Pradhan Mantri National Dialysis Programme under NHM

Work by Food Safety and Standards Authority of India (FSSAI)

8. "Eat Right India" and Safe and Nutritious Food at Workplace campaign by FSSAI (Section C.3.3. below).

Schemes by other Ministries

9. The National Clean Air Programme – Section C.2.3. above

10. Smart Cities Programme and Atal Mission for Rejuvenation and Urban Transformation (AMRUT) – led by Ministry of Housing and Urban Affairs under which spaces for walking, cycling and sports, waste management and control of Pollution are to be integrated.

11. Ministry of Road Transport and Highways: Section C.2.4. above.

We discuss the most critical of above interventions below, in addition to those discussed elsewhere in this document.

a. National Programme for Prevention & Control of Cancers, Diabetes, Cardiovascular Diseases and Stroke

The Government of India initiated the National Programme for Prevention and Control of Cancers, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) in 2010-11. This was an integration of two programmes, the National Cancer Control Programme (NCCP) and the National Programme for Prevention and Control of Diabetes, Cardiovascular Diseases and Stroke (NPDCS). The focus of NPCDCS is on promoting healthy lifestyles, early diagnosis and management of diabetes, hypertension, cardiovascular diseases & common cancers e.g. cervix cancer, breast cancer & oral cancer.

The main components envisaged in the NPCDCS are District NPCDCS Programme in 626 Districts; NCD Focal Centres in 54 Medical Colleges; State/UT NCD Cell (35); National NCD Cell at MoHFW in New Delhi; IEC and BCC activities; Capacity Building and Research; Inter-sectoral Convergence and Monitoring (including MIS) and Evaluation. The NPCDCS also stresses the importance on Inter-sectoral convergence for prevention and management of NCDs between Panchayati Raj Institutions, School Education, AYUSH practitioners, district administration, social groups (e.g. women and youth) for various activities related to NCD prevention and control under the programme. (See Annex 2 for details of NPCDCS).

Role of WHO: WHO provided technical support for design of the above programme under a collaborative programme between GoI and WHO India in 2008-2009.

b. National Non-communicable Disease Monitoring Survey

From Oct 2017, a National Non-communicable Disease Monitoring Survey (NNMS) is being conducted in 300 Urban and 300 Rural primary sampling units (20 HH in each unit) by the ICMR and NCDIR with support of MoHFW . The 10 targets and 21 indicators of the National NCD Monitoring Framework will be covered. Year 2010 will be taken as a baseline and progress on the NCD targets will be assessed in 2015, 2020 and 2025. 10 implementing agencies will implement the survey across 27 states of India. The survey focuses on NCD risk factors mainly tobacco consumption (both smokeless and smoking), harmful intake of alcohol, dietary habits, dietary salt intake, physical measurements, physical activities, body mass index, fasting blood sugar and blood pressure. WHO India provided technical support for the survey.

c. National Mental Health Programme

The National Mental Health Program is the backbone of public mental health services in India. It was first launched in 1982 and later updated in 1996 with the District Mental Health Programme (DMHP) in some districts. The programme was re-strategized in 2003 with additional components like training, IEC and availability of essential psychotropic drugs and allocation of nodal centres for each regions. The main components of the Programme are:

1. District Mental Health Programme
2. Community health centres
3. Primary health centres
4. PPP Model
5. Day care centres
6. Residential homes for continuing care
7. Long-term continuing care homes
8. Mental health services
9. Mental health helplines

The District Mental Health Programme was started to provide mental health service at the community level by integrating mental health with general healthcare delivery system. Under the 12th five-year plan, 123 districts were covered for DMHP. It collaborates with NGOs/ schools for life skills training and Panchayats for sensitization and awareness creation.

The major services under the programme are:

a. Full range of treatment - drugs, tests, management, inpatient care, emergency services, long-term care.

b. Capacity Building- training of medical officers and para-medical staff and grass root community workers.

c. Awareness generation – IEC activities.

The program provisions cover the full scope of WHO provisions and other best practice models at par with developed countries. Moreover, it also provides provisions for community involvement, contractual manpower and NGOs through PPP mode. The monitoring and evaluation is to be done by an independent quasi-government third party unit called State Mental Health Authority under State Mental Healthcare Act (SHMA). There is a pre-allocated budget for each SHMA according to capacity size and facility.

C.2.6. Role of WHO India in support to National Mental Health Programme

In Jan 2012, a resolution on mental, neurological and substance use disorders was adopted by the WHO Executive Board. The resolution urged WHO and Member States to collaborate in the development of a comprehensive mental health action plan and was discussed and approved at the WHO World Health Assembly in May 2012 . Subsequently,

WHO's comprehensive mental health action plan 2013-2020 was adopted by the 66th World Health Assembly.

WHO also played an important role in advocating the need of Indian mental health policy and its role in alleviating the treatment gap and strengthening mental health system across the country. A WHO global representative made presentations to the Parliamentary Committee and facilitated approval by the Parliament of the Mental Health Policy in Oct 2014. Besides, WHO (INDIA) also provided technical support to Central NMHP cell by providing a dedicated team of mental health specialist and public health specialist for support to MoHFW on mental health related and provide technical support to state governments when needed.

Subsequently, a study by WHO in 2015 showed that one in five Indians may suffer from depression in their lifetime, equivalent to 200 million people. It also found that due to the stigma associated with mental illness, a lack of awareness, and limited access to professional help, only 10-12% of these sufferers will seek help.

C.3. Question 3. Support to evidence generation and implementation by WHO India for Best Buys

How did the WHO India Office support in evidence generation and implementation on best buys?

Work in Progress! Some areas for improvement!

Reason for rating: Research supported by WHO India both during the Health Impact Assessment of relevant non-Health Ministries as well as research supported through CSOs such as PHFI and NCD India Alliance has contributed to significant evidence on urgent action on Best Buys on NCDs in India. WHO India office has also made considerable efforts at implementing Best Buys through multiple actions.

In Tobacco Control, long efforts have started yielding fruit, as seen by the GATS2 survey results showing reduced tobacco consumption. On Unhealthy Diet, FSSAI and other Ministries have initiated series of interventions, though it is too early to get results. On Cardiovascular diseases and cancer, national programmes have been running, though these need to be strengthened through larger investments in infrastructure and insurance. Alcohol control and Physical Inactivity are lagging behind the most, and many more efforts are needed through multi-stakeholder mechanisms and policy measures.

Discussion: WHO advocates a set of 16 most effective interventions (called the "Best Buys") that nation states can make for rapid response to NCDs. (See Box 3 below).

Box 3: "BEST BUYS" on NCDs

A. Reduce Tobacco Use
1. Increase excise taxes and prices on tobacco products
2. Implement plain/standardized packaging and/or large graphic health warnings on all tobacco packages
3. Enact and enforce comprehensive bans on tobacco advertising, promotion and sponsorship
4. Eliminate exposure to second-hand tobacco smoke in all indoor workplaces, public places, public transport
5. Implement effective mass media campaigns to educate public about harms of smoking/ tobacco use and second-hand smoke
B. Reduce the Harmful Use of Alcohol
6. Increase excise taxes on alcoholic beverages
7. Enact and enforce bans or comprehensive restrictions on exposure to alcohol advertising (across multiple types of media)
8. Enact and enforce restrictions on the physical availability of retailed alcohol (via reduced hours of sale)
C. Reduce Unhealthy Diet
9. Reduce salt intake through reformulation of food products to contain less salt and setting target levels for amount of salt in foods
10. Reduce salt intake through the establishment of a supportive environment in public institutions such as hospitals, schools, workplaces and nursing homes, to enable lower sodium options to be provided
11. Reduce salt intake through a behaviour change communication and mass media campaign
12. Reduce salt intake through the implementation of front-of-pack labelling
D. Reduce Physical Inactivity
13. Implement community wide public education & awareness campaign for physical activity, incl. mass media campaign with other community based education, motivational & environmental programmes for behavioural change of physical activity levels
E. Manage Cardiovascular Disease and Diabetes
14. Drug therapy (incl. glycaemic control for diabetes and control of hypertension using a total risk approach); Counselling to individuals who had a heart attack/ stroke and to persons with high risk (. 30%) or moderate to high risk (. 20%) of a fatal and non-fatal cardiovascular event in next 10 years
F. Manage Cancer
15. Vaccination against human papillomavirus (2 doses) of 9–13 year old girls
16. Prevention of cervical cancer by screening women aged 30–49

The efforts by WHO India so far on the Best Buys have been multifarious and, through the mechanism of NMAP, targeted relevant Ministries and Departments. Research supported by WHO India has also contributed to significant evidence for urgent action on Best Buys in India. Following actions have been taken by various stakeholders on Best Buys:

C.3.1. Reduce Tobacco Use

a. History of Tobacco control in India

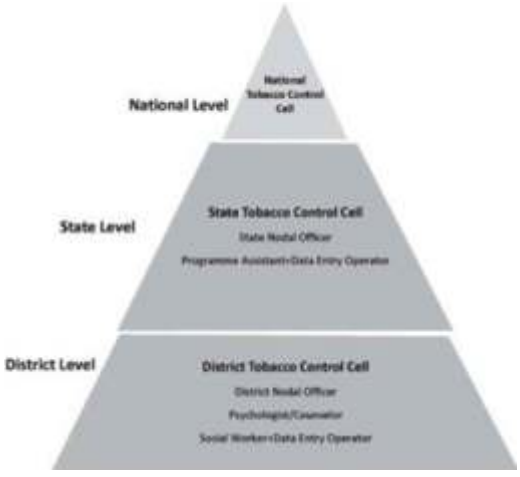
Tobacco control in India has gone through a long history involving tremendous work by WHO India, CSOs and the Government of India for almost a decade (See Annex 8 for timeline). Following are some major landmarks :

- In 1987, AIIMS, with YMCA, organized a national consultation for CSOs on tobacco control.
- WHO announced the World No Tobacco Day (31 May) in 1987.
- In 1999, School students of Delhi with NGO HRIDAY send 25,000 signatures to Prime Minister of India asking for a comprehensive ban on all forms of tobacco advertising.
- In 2001, nine NGOs came together to form Advocacy Forum for Tobacco Control

- The Indian Parliament passed a comprehensive tobacco legislation called Cigarettes and Other Tobacco Products (COTPA) in 2003, and the GoI launching the National Tobacco Control Programme launched in 2007.
- In 2012, Film rule introduced under COTPA; TV programmes and films showing tobacco products were to contain 3 types of warning messages about harmful effects of tobacco
- In 2016, the WHO FCTC Global Knowledge Hub on Smokeless Tobacco started at ICMR-National Institute of Cancer Prevention and Research (ICMR-NICPR), Noida.
- In 2016, MoHFW launched the National Tobacco Cessation Quitline Services (1800-112-356) to guide tobacco addicts to quit tobacco and the Toll-free help line 1800110456 by MOHFW/WHO in partnership with CSOs to report violations. Similarly, the 'mCessation' mobile app by MoHFW helps tobacco users to successfully quit tobacco use through text-messaging and via mobile phones (011 22901701).
- In 2016, large specified health warnings on tobacco products covering 85% of both sides of the tobacco product packs were introduced. Quitline Number (1800112356) was also included in the specified health warnings for creating awareness among tobacco users, and give them access to counselling services for behaviour change.
- All schools follow "Tobacco Free Educational Institutions" guidelines; must have "Tobacco Control Committee"
- To reduce production of tobacco, Crop Diversification Programme (CDP) under Rashtriya Krishi Vikas Yojana was expanded to 10 states for replacing tobacco farming with alternate crops/cropping system during 2017-18 with allocation of funds.
- MoLE in 2018-19 received a grant of INR 200 crore for Beedi Welfare Fund. There are around 50 lakh Beedi workers and MoLE has started initiatives and skill development programmes for alternative livelihoods.
- In 2018, MoHFW issued an Advisory to ban Electronic Nicotine Delivery System (ENDS) including e-Cigarettes, Heat-Not-Burn devices, Vape, e-Sheesha, e-Nicotine Flavoured Hookah, and the like devices that enable nicotine delivery except for the purpose & in the manner and to the extent, as may be approved under the Drugs and Cosmetics Act, 1940 and Rules made thereunder. MoHFW formally banned ENDS on Sep 18, 2019.

b. Details of the National Tobacco Control Programme

Legislation and Programme: In May 2013, the Government of India enacted the national tobacco-control legislation namely, "The Cigarettes and other Tobacco Products (COTPA)". India also ratified the WHO-Framework Convention on Tobacco Control (WHO-FCTC) in Feb 2004. Further, to facilitate effective implementation of COTPA, minimize deaths caused by tobacco, and bring greater awareness on harmful effects of tobacco, the MoHFW launched the National Tobacco Control Programme (NTCP) in 2007- 08 in 42 districts of 21 States/Union Territories, but now runs in 612 districts in all states/ Union Territories.



Implementation: NTCP is implemented through a three-tier structure, the National Tobacco Control Cell (NTCC) at Central level, State Tobacco Control Cells (STCC) at State level

& District Tobacco Control Cells (DTCC) at District level. There is also a provision of setting up Tobacco Cessation Services at District level (Figure 7 on right). The main activities under to control tobacco use are: Training and Capacity Building; IEC activity; Monitoring Tobacco Control Laws and Reporting; and survey and Surveillance

Monitoring: The NTCC monitors tobacco control through detailed formats for STCCs for intersectoral action. It monitors number of meetings with different stakeholders, schools, number of meetings with relevant state government departments, etc. Moreover, the Police departments review compliance with COTPA in the monthly crime review meetings.

c. Major Achievements in Tobacco Control in India

- As per the latest GATS 2016-17, the prevalence of tobacco use has declined. The first round of GATS 2009-10 indicated that 34.6% of the adults (47.9% males and 20.3% females) were tobacco users. From then to 2017 the prevalence of tobacco consumption has declined by 17% (relative decrease) to 28.6%, which means number of tobacco users has reduced by about 8.1 million. The prevalence of tobacco use among the young population between 15-24 years of age has also reduced from 18.4 to 12.4% which is a 33% relative reduction with regards to the survey done in 2009-2010. Tobacco usage amongst minors (aged 15-17) and adolescents (aged 18-24) also saw a relative reduction of 54% and 28% respectively. .
- Fiscal Measures: Tobacco products are under the highest tax slabs under GST
- Some good examples of community control of tobacco are available that can be scaled up (Box 4 below):

Box 4: Tobacco control program becomes a movement in Mizoram

Mizoram has the highest tobacco prevalence in India at 67.2% (GATS 2009-10) with 72.5% males and 61.6% females consuming tobacco in some form or the other. It also has the lowest "planning to quit tobacco rate" in the country. Secondhand smoke exposure is very high at 97.7% at homes. Mizoram also has the highest incidence of a number of cancers - lung, oesophagus, stomach, all sites etc. - in the country (PBCR 2009-11) . The state, therefore, needed to take up urgent measures to lower the use of tobacco in Mizoram.

With immense support from civil society groups, the Tobacco control program became a community movement in Mizoram. CSOs led this movement and the Government included them in various levels and committees. CSOs were also part of the District level Anti-Tobacco Squads. These Squads are present in every district under the chairmanship of District Magistrate. District administration, Police department and Health officials are other members of these squads. They regularly operate a drive four times in a month. Generally they target early morning hours every Saturday in the Bazar. The core motive of these drives is to see that no one smoking in public areas. The squad fines each offender Rs. 200 if found smoking in public, and also counsel them against smoking and to visit the TCC. They are returned Rs. 100 of the fine if the offender visits the TCC. Here they are counselled for quitting tobacco. See Annex 7 for further details. ~ *Dr. Jane R. Ralte, Nodal officer Tobacco Control Program, Mizoram*

d. Constraints

Some ministries have expressed difficulties in implementing some NMAP suggestions or have requested additional support. For example, the Department of Commerce has been asked to revise the mandate of the Tobacco Board to include support and promotion of alternative crops of tobacco via Tobacco Board Act, 1975 and to limit facilities and incentives to alcoholic and ultra-processed food industry in Special Economic Zones (SEZ). The department feels its mandate is to produce quality Flue Cured Virginia (FCV) tobacco crops for export. India is the third largest producer and exporter of FCV tobacco globally and it will be difficult to compromise on this issue, the Dept. The department also avers that it has no mandate to institute disincentives for demerit goods in Special Economic Zones (SEZ).

C.3.2. Reduce the Harmful Use of Alcohol

WHO developed a Global Strategy to reduce harmful use of alcohol in 2010 and publishes a Global status report on alcohol and health (latest was in 2018). It also provided technical support to GoI to formulate the National NCD Monitoring Framework. Following interventions have been made by GoI to reduce alcohol use.

I. Alcohol Regulations in India

The Government of India committed to reduce alcohol consumption by 10% by 2025 under the National NCD Monitoring Framework. GoI has come up with a several controls including restrictions on advertisements, promotion and sponsorship of alcoholic drinks; ban on drinking in public places; restrictions on opening of liquor shops at certain places; regulating density of alcohol outlets in a particular district/state; regulating availability through restrictions on time and place of sales; declaring dry days; prescribing minimum legal drinking age (varies state-wise but all above 18 years); printing health warning on alcohol bottles; and levying excise duty on alcohol.

ii. Scheme for Alcohol de-addiction by the Ministry of Social Justice and Empowerment (MoSJE)

The MoSJE runs a scheme for assistance for de-addiction called the 'Prevention of Alcoholism & Substance (Drugs) Abuse and for Social Defence Services' under the Narcotic Drugs and Psychotropic Substances Act (NDPS), 1985.

Target Groups under the Scheme: The scheme targets all victims of alcohol and substance (drugs) abuse with a special focus on children including street children, both in and out of school; adolescent youth; dependent women and young girls, affected by substance abuse; high risk groups such as sex workers, Injecting Drug Users (IDDs), drivers etc.; and prison inmates in detention facilities including children in juvenile homes addicted to drugs.

Substances, abuse of which, are covered under the Scheme are - alcohol; all Narcotic Drugs and Psychotropic substances covered under the NDPS Act, 1985 and any other addictive substance, other than tobacco.

Interventions under the scheme include the following:

i) Awareness and Preventive Education

ii) Drug Awareness and Counselling Centres

iii) Regional Resource and Training Centres

iv) Integrated Rehabilitation Centres for Addicts (IRCAs)

v) Workplace Prevention Programme (WPP)

vi) De-addiction Camps

vii) NGO forum for Drug Abuse Prevention

viii) Innovations to strengthen community based rehabilitation

ix) Technical Exchange and Manpower development programme

x) Surveys, Studies, Evaluation and Research on the subjects covered under the scheme.

400 IRCAs are functioning with the support of the Ministry in the country. De-addiction camps are organized regularly to reach out to uncovered areas. The Ministry has set up a National Centre for Drug Abuse Prevention (NCDAP) in the National Institute of Social Defence (NISD) for capacity building and training of NGOs running De-addiction centres. It is supporting 12 NGOs working in drug abuse prevention to function as Regional Resource and Training Centres (RRTCs) for imparting training in local cultural setting to the service providers working in various regions. More recently, in 2017, the Supreme Court passed an order that no liquor stores should be even visible from highways, or located within a distance of 500 metres of the highways, or be directly accessible from national or state highway.

Despite above interventions, considerable efforts are still required on reduction of Alcohol consumption. Taxes on alcohol have not been raised adequately, advisories to insurance companies to not invest in demerit goods are being issued, Brand stretching and surrogate advertisements on alcohol are yet to be banned by MoI&B. There is still no National Alcohol Prevention Policy.

C.3.3. Reduce Unhealthy Diet

i. Food Safety regulations by FSSAI

The Food Safety and Standards Authority of India (FSSAI) has been established under Food

Safety and Standards , 2006 which consolidates various acts & orders that have hitherto handled food related issues in various Ministries and Departments. FSSAI has been created for laying down science based standards for articles of food and to regulate their manufacture, storage, distribution, sale and import to ensure availability of safe and wholesome food for human consumption. FSSAI has issued regulations, notices and Guidance Notes on various aspects of food safety (Box 5 below):

Box 5: Regulations, Guidance and Notifications by FSSAI on Food Safety

Regulations:

2018: Alcoholic Beverages, Artificial Ripening of Fruits, Fortification of Foods, Food Safety Auditing, Recognition and Notification of Laboratories, Advertising and Claims, Packaging

2017: Approval for Non-Specified Food and Food Ingredients, Food Recall Procedure, Import, Organic Food

2016: Food or Health Supplements, Nutraceuticals, Foods for Special Dietary Uses, Foods for Special Medical Purpose, Functional Foods and Novel Food;

2011: Food Product Standards and Food Additives, Prohibition and Restriction on Sales, Packaging and Labelling, Contaminants, Toxins and Residues, Laboratory and Sampling Analysis, Licensing and Registration of Food Businesses

Guidance Notes and Notices:

2019: Ensuring safety of pulses & besan, Recommended Dietary Allowance for Vitamins

2018: Currency Notes and Coins: A source of microbiological contamination; Handling and disposal of used cooking oil;

Issue of Formalin in Fish; Safe Ground Spices: How to ensure that they are not adulterated; Egg Quality and Safety: dispelling the myth about plastic eggs; Artificial Ripening of Fruits: ethylene gas- a safe fruit ripener; Stickers on Fruits & Vegetables; Irradiated Food is safe: busting myths around it; ICMR report on Tolerable Upper Limit on Vitamins

2017: Cinnamon (Dalchini) and Cassia (Taj); Guidelines for Food Recall; Reduction of contamination of food with Polycyclic Aromatic Hydrocarbons (PAH) from smoking and direct drying; High Fat, Sugar and Salt (HFSS) in food and associated health risks; Renaming of Scientific Panel on Fortified and Enriched Food; GMP requirements for factory premises for plant extracts, nutraceuticals, supplements. Source:[47]

ii. Other Interventions by FSSAI

- "Eat Right India" campaign to promote eating healthy food and shun HFSS foods; and the "Safe and Nutritious Food at Workplace" campaign for ensuring food standards at the workplace
- Collaboration with the POSHAN Abhiyaan, an overarching scheme for holistic nourishment, esp. to improve nutritional outcomes for children, adolescents, pregnant women and lactating mothers. Its vision is to attain a malnutrition free India by 2022. Anaemia Mukt Bharat is another program to reduce anaemia through 6 key interventions, one of which is providing iron-fortified foods.
- Food Safety and Standards (Labelling and Display) Regulations , under which packaged food companies will need to declare nutritional information such as calories (energy), saturated fat, trans-fat, added sugar and sodium per serve on the front of the pack.
- The Food Fortification Resource Centre (FFRC) has been set up to scale up food fortification across India. FFRC provides advocacy and technical support, builds awareness and works in partnership with all stakeholders. It has a two-pronged approach:
  - o Ensure fortified foods in safety net programmes for essential nutrients esp. to vulnerable sections
  - o Promote fortified foods in open market for consumers to adopt and improve health and nutrition.

iii. Interventions by other Ministries on Food Safety

MOI & B	Exploring restrictions on HFSS food advertising.
MoWCD	Revision to the National Nutrition Policy being considered Promoting non HFSS snacks in schools
MoLE	Examining promotion of healthy food under 'National Policy on Safety, Health and Environment at Workplace'
Dept. of Youth Affairs	Will issue advisory to ban advertisements of alcohol, tobacco and unhealthy foods during sports events
Dept. of Education	Promoting Kitchen Gardens in schools and integration of healthy food in Mid-day meals.
Dept. of Agriculture Cooperation & Farmers' Welfare	Promoting organic farming under 'Directorate of Organic Farming' and has launched schemes to reduce use of pesticides, insecticides, harmful chemicals.

iv. Constraints

The Department of Agriculture, Corporation and Farmers Welfare has pushed back on revisiting policy incentives and subsidies to cultivate crops with adverse health outcomes (e.g. palm oilseeds). The Department feels that since India's requirement of edible oil is 250 lakh MT but its production is only 100 lakh MT, their mandate is to promote palm oil production. Secondly, no scientific studies on adverse health impacts of palm oil were available on Indian populations, feels an official from the Ministry of Consumer Affairs, Food and Public Distribution.

C.3.4. Reduce Physical Inactivity

Section A.3.2.b. above outlined the urgent need to promote physical activity in India, as 392 million individuals were found to be inactive. To change the above scenario, various Ministries and actors are taking up several programmes:

National Wellness Campaigns	Recently initiated significant interventions toward increasing physical activity through the World Yoga day, Fit India Movement, Health and Wellness Centres.
Ministry of Housing and Urban Affairs	Promoting Non-Motorised Transport (NMT), cycling and walking tracks, and parks. Despite the above, considerable efforts are required for the same, especially for Behaviour Change. Also agreed to a include a systematic scoring criteria for NMT Already promoting bicycle sharing schemes, open air gyms parks and walkable streets.
Ministry of Youth Affairs and Sports	Other than the various interventions to promote sports in the country, the ministry is also running a programme to preserve and increase open spaces and playing fields in the country. A 'National Playing Fields Association of India' (NPFAI) headed by the Minister for Youth Affairs & Sports has been set up and works to protect, preserve, promote, develop and improve playing fields and open spaces and other facilities for sports and games.
Ministry of HRD	Several interventions for promotion of physical activity have been promoted by the education departments. See below.
Central Board of Secondary Education	Makes it obligatory for its affiliated schools to have adequate infrastructure for sports. CBSE has also advised its affiliated schools to allocate 40-45 minutes of physical activities and games for students of Classes I to X every day, and at least two periods per week (90 to 120 minutes) for students of Classes XI to XII.

Rashtriya Madhyamik Shiksha Abhiyan	Provides financial assistance to states to purchase sports equipment in secondary schools.
University Grants Commission	UGC implements several schemes to promote sports in higher educational institutions: - Free Education for Sports Medal Winner/Participants of National/ International Events; - Development of Sports Infrastructure and Equipment in Universities and Colleges; and - Establishment of Centre of Excellence for Development of Sports in Universities.

C.3.5. Manage Cardiovascular Disease and Diabetes

Cardiovascular diseases (CVDs) have now become the leading cause of mortality in India. A research on the epidemiology of CVDs in India found that a quarter of all mortality is attributable to CVD. The study findings are as follows:

"Ischemic heart disease and stroke are the predominant causes and are responsible for >80% of CVD deaths. The Global Burden of Disease study estimate of age-standardized CVD death rate of 272 per 100 000 population in India is higher than the global average of 235 per 100.000 population. Some aspects of the CVD epidemic in India are particular causes of concern, including its accelerated build-up, the early age of disease onset in the population, and the high case fatality rate. Premature mortality in terms of years of life lost because of CVD in India increased by 59%, from 23.2 million (1990) to 37 million (2010).

The NMAP targets 25% relative reduction in overall mortality from cardiovascular diseases, 25% relative reduction in prevalence of high blood pressure, halting the rise in diabetes and obesity, and ensuring that at least 80% of patients with cardiovascular diseases (and other NCDs) have access to relevant drugs and medical counselling by 2025. The NPCDCS consists of several programmes on Cardiovascular Diseases to meet the above targets (See section C.2.5.a. below). WHO India has collaborated with GoI for technical support to the NPCDCS and other interventions on CVDs.

C.3.6. Manage Cancer

Cancer claims over 8% of all deaths in India. The incidence of all cancers increased by 28% between 1990 and 2016, with new cases of cancer reaching 1.1 million. All types of cancers have been reported in Indian population including the cancers of skin, lungs, breast, rectum, stomach, prostate, liver, cervix, oesophagus, bladder, blood, mouth etc. The causes of such high incidence rates of these cancers may be both internal (genetic, mutations, hormonal, poor immune conditions) and external or environmental factors (tobacco, food habits, industrialization, overgrowth of population, social etc.) . The NPCDS has taken a number of initiatives on Cancer management.

i. Cancer programme under the NPCDCS

Under the National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS), for the Cancer component, there is the Tertiary Care Cancer Centres (TCCC) Scheme, which aims at setting up/strengthening of 20 State Cancer Institutes (SCI) and 50 TCCCs for providing comprehensive cancer care in the country. Under the scheme there is provision for giving a 'one-time grant' of Rs. 120 crore per SCI and Rs. 45 crores per TCCC, to be used for building construction and procurement of equipment, with the Centre to State share in the ratio of 60:40 (except for North-Eastern and Hilly States, where the share is 90:10). Several States do not have a single State Cancer Institute/TCCC, despite the pressure that is faced by Tertiary Care hospitals. . The roles specified under NPCDCS for medical officers is presented in Table 6 below.

Table 6: Role of Medical Officers in Cancer Prevention and Control specified under NPCDCS

Prevention of cancers	• Create awareness about the ills of tobacco and advocate avoidance • Encourage and assist habitual tobacco users to quit the habit • Promote healthy dietary practices and physical activity
Early detection of cancers	• Create awareness about the early warning signs of cancer • Encourage breast awareness • Encourage oral self-examination • Create awareness about symptoms of cervical cancer • Examine, as a routine, the oral cavity of patients with history of tobacco use • Offer clinical breast examination to any woman >30 years coming to health centre • Offer screening for cervical cancer to any woman >30 years coming to health centre • Promptly refer anyone with a suspicious lesion for accurate diagnosis and treatment
Treatment of cancers	• Ensure that every patient complies with therapy advised • If follow up care is required at the health centre level, ensure detailed instructions are provided by the treating institution.
Palliative care	• Ensure that patient is free from pain as far as possible. Learn & practice WHO step-ladder approach of pain management; refer to appropriate centre for oral morphine. • Achieve control of unwanted symptoms to the extent possible • Provide psychological support to the patient to accept the diagnosis and treatment • Involve the family in diagnosis, treatment and care as far as possible

ii. National Cancer Registry Programme

Much work is needed on prevention, early detection and Tertiary care. The National Cancer Registry Programme (NCRP) is an attempt to track the incidence. NCRP currently has twenty-six population-based registries and seven hospital based registries. Yet, cancer registries, mostly in urban areas, cover less than 15% of the population. Other potential concerns include accuracy, lack of detailed information on cancer diagnosis, and timeliness in updating the registry databases. A nation-wide population based screening for common NCDs – including oral, breast and cervix cancers has been initiated (section C.4.3.b below).

C.4. Question 4. Results of support to Health Systems Strengthening and Health Promotion by WHO India

What have been the main results of the WHO India Office's contributions to the achievement of the Multi sectoral response to NCDs prevention and control including health system strengthening, health promotion (and data and surveillance)?

Good Progress. Well Done!

Reason for rating: On Health Promotion, WHO India has supported MoHFW to advocate with non-Health Ministries in taking various measures for prevention and control of NCDs. There have been some initial successes in the same too, esp. through the NMAP mechanisms. Interventions by several Ministries both at the demand and the supply side have been initiated. Several areas of intervention still remain, esp. in national and state budgets, crop insurance for vegetable and fruit farmers and a more stringent tax regime for demerit goods. Additionally, GoI has launched a web portal and several campaigns for health promotion. A media analysis with newspaper articles over 10

randomly selected months over past 5 years revealed that the visibility of NCDs, public health services and risk factors has increased significantly over this period. Most of this coverage is spontaneous, and more targeted efforts could ensure that newspapers promote a nudge approach to change behaviour.

On Health System Strengthening, the focus after initial policy setting phase at the Centre will shift to the states. WHO India has supported GoI in readiness assessments, and in setting up training modules for State officers. It is also piloting a refresher training for Medical Officers on NCDs. A number of issues about the form and content of capacity building - esp. for frontline health workers - need to be sorted before large-scale benefits can be seen. The recently launched Comprehensive Primary Health Care programme, linked to Ayushman Bharat Programme providing insurance to 10o million poor households is a promising initiative, if the issues in targeting, infrastructure and budgets are resolved. Another critical area for advocacy in health systems is better integration of NCDs into the medical curriculum in the country, which needs initiatives from GoI and WHO India.

On surveillance, monitoring and research, WHO India has supported GoI, among other things, in the national population-based NCD screening and strengthening the HMIS and the Integrated Disease Surveillance programmes for communicable and non-communicable diseases.

C.4.1. Health Promotion

a. Fiscal and policy measures for Health Promotion by various Ministries on NCDs

In addition to actions mentioned in section C.3. above, following actions have been reported by various ministries :

i. Demand side Interventions on Health Promotion

Finance Ministry	Has imposed high GST (28%) on tobacco and sugar-sweetened beverages.
	Has increased taxation on some demerit goods, while the I & B has worked on Advertisement control on demerit goods
FSSAI	Has issued guidelines for front-of-pack labelling, other than efforts mentioned above.
MoI&B	Will advocate with media and entertainment industry to allocate free airtime and space for health promotion particularly for NCD risk factors.
	Will also give more emphasis on restricting advertisement of Pan masala, HFSS foods and surrogate advertisement of tobacco and alcoholic products in all advertising sectors.

ii. Supply side Interventions on Health Promotion

NITI Aayog	Issued PPP guidelines for NCD service provision recently
	Started an Annual Health Index – a ranking system of States on Health
Ministry of Food Processing Industries	Will incentivize food processing industry to produce, market healthy food under SAMPADA (Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters).
	National Institute of Food Technology Entrepreneurship and Management to conduct research in technology up gradation to reduce wastage of fruits and vegetables.
MoWCD	Promotion of non HFSS snacks in schools. Promotion of yoga and other physical activities for children, adolescent girls and women through Anganwadi centres.

	Create awareness on ill effects of tobacco and alcohol among females, adolescent girls through SABLA programme, ICDS and other similar schemes .
	Promote healthy lifestyle and nutrition awareness programmes through activities planned under Food & Nutrition Board and during National Nutrition Week.
Ministry of Housing and Urban Affairs	Already promoting open gyms, parks, walkable streets in both SCM and AMRUT schemes
	'Waste to Energy' plants which are air polluting are now not advised for waste disposal under 'Swachh Bharat Mission (Urban)'. Recommended mechanism for waste disposal is now Composite Waste Management.
	Will de-incentivize municipal corporations still using 'Waste to Energy' Mechanism for waste disposal.
	Under Smart Cities Mission and other schemes, green spaces to be developed on roadside.
Ministry of Human Resource Development	Providing coarse grain under Mid-Day-Meal Scheme, will also include high-fibre foods
	Parents and students to be educated about healthy food options
Ministry of Human Resource Development	Providing coarse grain under Mid-Day-Meal Scheme, will also include high-fibre foods
	Parents and students to be educated about healthy food options
Ministry of Labour and Employment	Under Employee's State Insurance Act, every personnel at the time of job entry is screened for NCD conditions including hypertension and diabetes.
	Beneficiaries and their family members are eligible for annual check-up for NCD conditions.
	Screening protocols will be implemented through ESI network.
Ministry of Youth Affairs and Sports	Ministry will prohibit direct and indirect advertisement of tobacco, alcohol, unhealthy foods during sports events and in their premises under National Sports.
	Promotes inclusion of activities on healthy lifestyle in Youth clubs, Nehru Yuva Kendra and other schemes of Department of Youth Affairs.
	Recently launched the "Fit India" Movement.
Ministry of Parliamentary Affairs	Ministry will include healthy lifestyle questions in quizzes and other competitions organized as part of Youth Parliament.
	Guidelines related to Health and Wellness Ambassadors launched by Prime Minister can be included in such events /competitions for raising awareness.
	NCD advocacy material to be shared by MoHFW with Ministry of Parliamentary Affairs; will sensitise Parliamentarians in both houses on NCDs

b. Constraints in demand and supply side interventions

- Vegetable, fruit farmers do not yet access crop insurance under PMFBY. Enhanced availability of fruits and vegetables and reduced prices of the same is a constraint.
- Restrictive tax financial incentives for all demerit goods are not yet in place.
- Taxes and control of surrogate advertisements on alcohol are still awaited, as is a National Alcohol Policy.

- Some ministries expressed conflicting concerns. E.g. on Palm oil and tobacco cultivation.
- State Health IEC departments report a resource shortage in staff and skills to design targeted IEC tools on NCDs. Moreover, a large number of CSOs and CSR organisations work in the Health Sector, but often in isolation, and only a small number of these inform policy design and programme implementation.
- A budget of Rs.1200 Crore was allocated for Health and Wellness Centres in 2018-19, which was insufficient. Thus, only 10,000 H&WC were functional by Mar 2019 against target of 15,000 . Similarly, under National Health Protection Mission, an allocation of Rs. 2400 crores was made in 2018-19 covering insurance premium for 50 crore individuals, against NITI Aayog's estimation of Rs. 10,000 crores for sustainability of the scheme .

c. Mass media campaigns

Traditionally, health promotion systems in India targeted communicable diseases, maternal and child health. Health promotion on NCDs is a relatively recent priority. Several initiatives have been taken up for health promotion recently:

- A National Health Portal was launched for Health-promotion (https://www.nhp.gov.in) containing information for citizens in five languages – English, Bengali, Hindi, Punjabi, and Tamil. It also links to various health programmes – e.g. safe maternity - and mobile apps for tobacco cessation, managing diabetes, etc. (Figure 8 below).

Several other campaigns on prevention and control on risk factors of NCDs are being carried out:

- Various promotion material on healthy eating has been developed by FSSAI under "Eat Right India" and "Safe and Nutritious Food at Workplace" campaigns
- Campaigns against Tobacco run by National Tobacco Control Programme, including MCessation – a mobile app to help de-tobacco addiction
- Numerous CSO Health related campaigns e.g. Pinkathon, Cancer Marathon, Run for Cancer, Rahagiri, etc.

e. Media Analysis to test increase in awareness on NCDs

Almost all respondents felt that there is a general increase in awareness about risk factors on NCDs. However, except for the GATS 2 survey, which recorded a decrease in the use of tobacco, there was not much KAP survey based evidence available to verify these claims. Consequently, a media analysis exercise with newspaper articles of randomly selected 10 months over 5 years was conducted under this evaluation. This analysis reveals that the visibility of NCDs, public health services and risk factors have increased

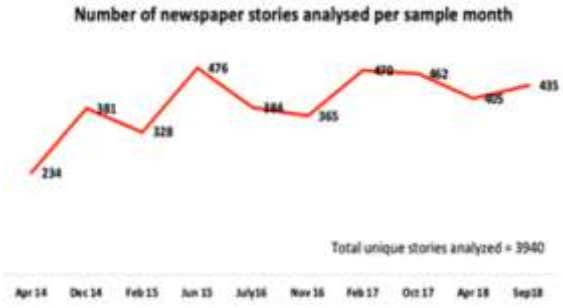
significantly over the past 5 years. However, this coverage is spontaneous, and more efforts are needed to ensure that newspapers promote a nudge approach to change behaviour. Indeed a lack of change in behaviour among large sections of the population in health practices is still a major concern in the work on NCDs.

For this evaluation, we conducted a media monitoring analysis of a random sample of 3940 media articles from 19,700 stories in 25 newspapers in 10 months over the past 5 years. The detailed results of this analysis are presented in Annex 5. The main findings of the analysis are presented below:

i. Methodology followed for Media Analysis

We received a total of 19,701 unique articles from Press Monitor from which we selected a random sample of every fifth of these articles and arrived at 3,940 unique stories. The randomly selected number of articles we analysed is given in Figure 9 on right.

Classification: We classified these 3940 articles into the following 5 categories:



1. All Communicable Diseases

2. NCDs

- Cancer; Diabetes
- Lung Diseases; Heart Diseases
- Hypertension; Mental Health
- General Health and prevention

3. Health Risk Factors

- Air Pollution; Water Pollution
- Accidents; Obesity; Alcohol; Tobacco
- Medical Negligence
- Unhealthy Food; Malnutrition

4. Alternate Medicines

- Ayurveda, Yoga, Unani
- Siddha, Homeopathy
- Other Alternative Medicine

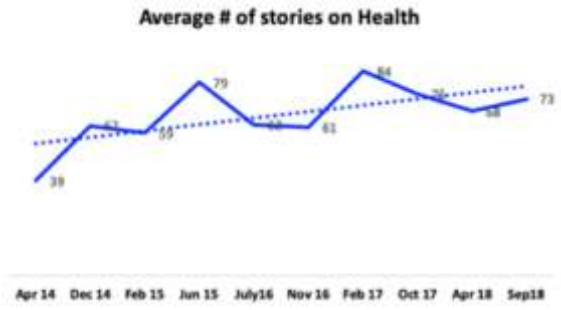
5. Public Health Stories

- Health Policy; Health Services
- People's participation, NGOs, Campaigns
- New Medical Science, Diagnosis, technology

ii. Major Findings from the Media Analysis

ii.1. Increase in number of newspaper articles on health

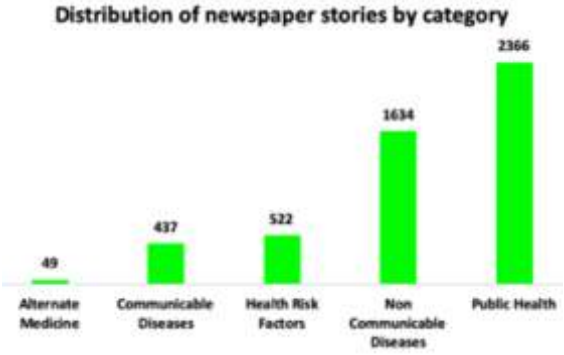
The average number of articles per month shows an upward trend. Thus an increasingly larger number of stories on health have been covered over the past 5 years. (Figure 10 on right).



ii.2. Category-wise number of stories

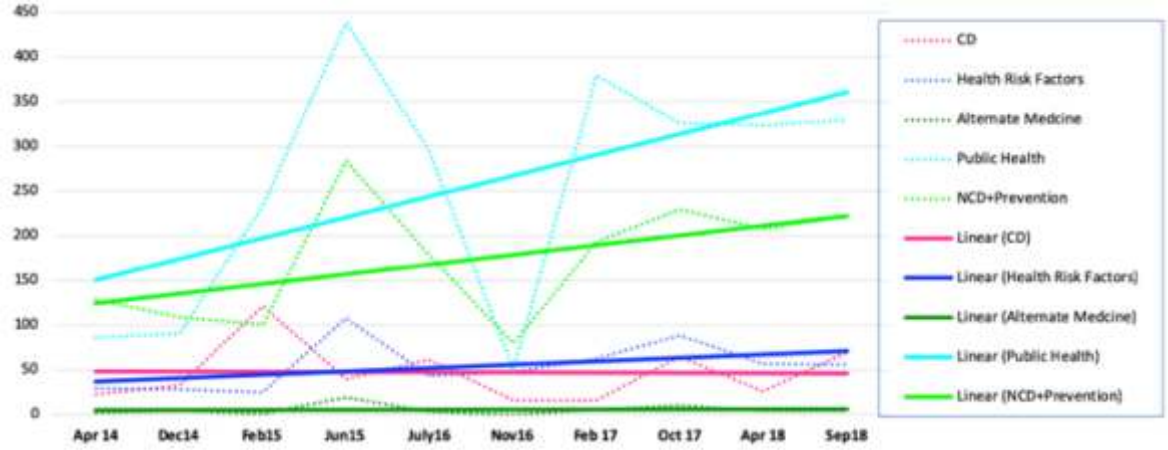
Some of the stories fell into more than one category. The count of all classified articles in the above categories (including duplicated articles) is shown in Figure 11 on left.

The highest number of articles were related to Public Health (Health Policy, Health Services, People's participation, NGOs, Campaigns, New Medical Science, Diagnosis, technology); NCD related articles were second highest in number while the lowest were related to Alternate Medicine.



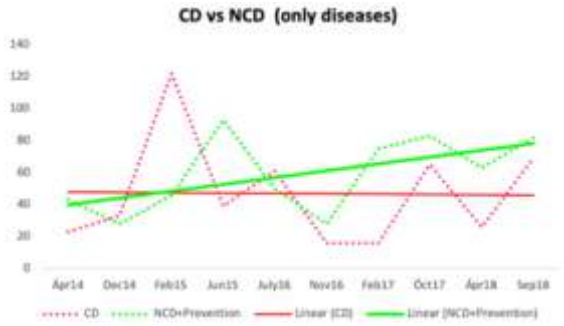
ii.3. Trends in number of Media articles

There is a clear increasing trend in the stories on Public health, NCD and Health Risk factors (in that order). Stories on Communicable diseases and Alternate medicines have remained virtually at the same level, with almost no significant increase. As compared to Communicable Diseases., which show a flatter growth, stories on NCDs and on Health Policy show a sharper increase and a greater absolute number of stories from 2014 to 2018. See Figure 12 below.



ii.4. Visibility of stories on CD vs. NCD

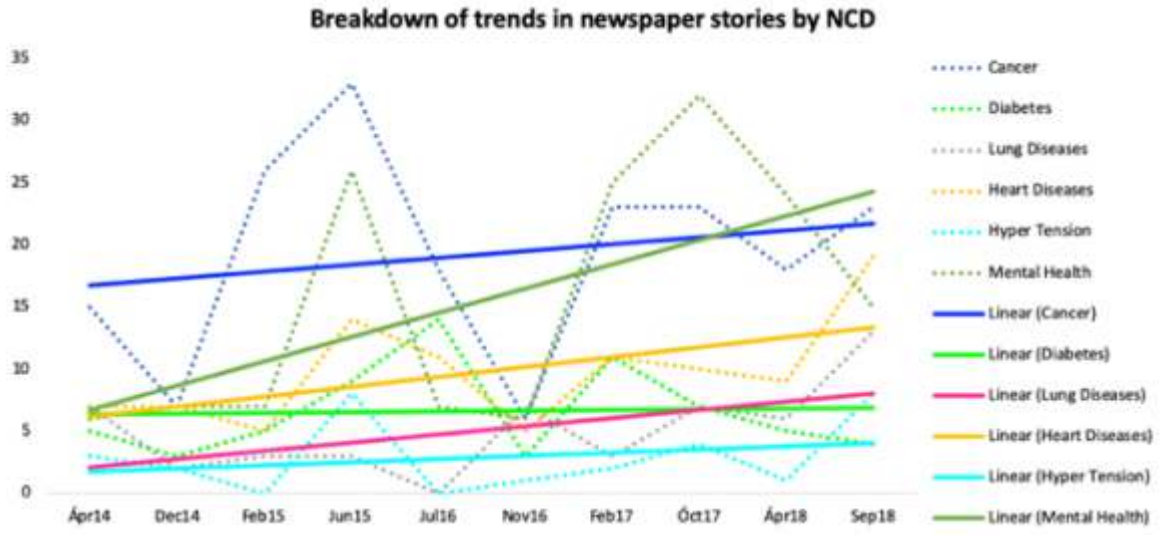
Similarly, if we analyse purely the stories related to diseases, again there is a significant increase in stories about NCDs, while the stories about CDs have remained almost constant. We may infer from this that there is a higher visibility of Public Health issues, and NCD and Health Risk Factors over the 5 years of study. Figure 13 below.



ii.5. Coverage within NCD

Within NCDs, stories on Mental Health show the fastest increase, followed by stories on Cancer, CVD, Lung Diseases diabetes and hypertension, in that order. (Figure 14 below).

iii. Conclusions from the Media Analysis



a. General increase in visibility of Health Issues, esp. Public Health and NCD

There has been a general increase in the visibility of health related stories in analysed newspaper stories. The most covered stories related to Public Health, followed by NCDs, Health Risk Factors and Alternative medicine, in that order.

b. Increase in stories on NCD is faster than on CD

The rate of increase in the number of stories on NCD is greater than that on CD, which may show a higher interest on the former. The number of stories on CD, the other hand, have remained more or less constant.

c. Coverage within NCD

Within NCD, newspaper maximum number of stories focus on General and Preventive Health, Mental Health, Cancer, Cardiovascular Diseases, Diabetes, Pulmonary Diseases and Hypertension – in that order.

d. Rapid increase in number of stories on NCD compared to CD

Analysing purely stories related to diseases, there is a significant increase in stories about NCDs, while stories about CDs have remained almost constant and at a much lower magnitude. We may infer from this that there is a higher visibility of NCDs compared to CDs over the 5 years of study.

e. Coverage on Public Health

The largest number of stories within Public health focused on Health services, and rose sharply over the five years, signifying a rapid increase in the concern over Health Service issues.

f. Risk factors

The most covered risk factor has been Air Pollution followed by Tobacco, alcohol and obesity, in that order. Sadly, unhealthy food as a risk factor is the least covered in the stories analysed.

C.4.2. Health System Strengthening

Section 4.2. above have discussed the strengthening of national structures for planning and monitoring in India on NCDs. The initial stage of NMAP implementation focused on national level systems and processes. The next stage will focus on the states. Following actions were supported by WHO India to strengthen state level action on NCDs:

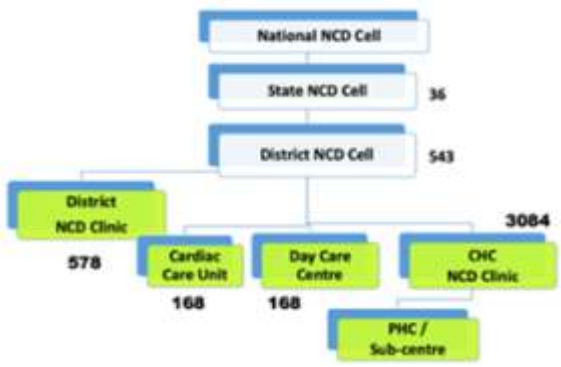
a. Supporting GoI in conducting a readiness assessment of States on NCDs

MoHFW officials point out that the next step in implementation of the NMAP is to conduct a readiness assessment of the States in implementing the same. With this in mind, the MoHFW in collaboration with WHO India and PGIMER, Chandigarh, is conducting a review of the preparedness of various states in implementing the activities envisaged under WHO India is already supporting Government of India on assessing readiness of States on rolling out NCD related programmes with PGIMER, Chandigarh. Additionally, WHO India is also planning a training programme on NCDs for Medical Officers in partnership with UNDP and PHFI.

b. Strengthening existing State level interventions

NHM reports that State NCD Cells have been established in all 36 States/UTs, and District NCD Cells have been established in 543 district headquarters till March 2017. 578 District NCD Clinics, 168 Cardiac Care Units, 168 Day Care Centres and 3084 NCD Clinics in CHCs have been established. The structure for addressing NCDs that has been put in place so far is shown in Figure 2 on right :

However, at State level, the operationalisation of these District Cells and other facilities is still in a beginning stage. Of the five states visited– Tamil Nadu, Mizoram, Chhattisgarh, Odisha and Uttarakhand – in four states (except Tamil Nadu), vacancies for staff of State NCD Cells are



being filled. Population based screenings for NCDs have started in all States. Under NPCDCS States have initiated activities for prevention and control of NCDs. WHO India provides technical support in various ways in above process.

c. Strengthening NCD Services at District level

The NPCDCS program has two components viz. (i) Cancer (ii) Diabetes, CVDs and Stroke. These have been integrated at different levels in NHM. The following package of services at State, Districts, CHC and Sub Centre level planned under the Programme will be closely monitored through NCD cell at different levels:

Table 7: Package of Services on NCDs at various levels

Health Services	Packages of services
Sub centre	Health promotion for behaviour change and counselling. 'Population based/ Opportunistic' screening of common NCDs including cancer. Awareness generation of early warning signals of common cancer & other risk factors of NCDs. Referral of suspected cases to PHC/CHC/ nearby health facility. Follow up of patient put on treatment.
PHC	PHC Health promotion for behaviour change and counselling. 'Population based/ Opportunistic' Screening of Diabetes, hypertension, 3 common cancers (oral, breast, cervical by VIA). Clinical diagnosis, treat common NCDs incl. Hypertension and Diabetes, refer complicated cases of DM/HTN to CHC/DH. Identification of early warning signals of common cancer. Referral of suspected cases to CHC/DH and follow up of patient put on treatment.
CHC/FRU	Prevention and health promotion including counselling. Early diagnosis through clinical and laboratory investigations. Diagnostics: Blood sugar, Total Cholesterol, Lipid, Blood Urea, Creatinine, X-Ray, ECG, USG (Outsourced, if unavailable) 'Opportunistic' Screening of common cancers (Oral, Breast and Cervix). Management of common NCDs; Referral of complicated cases to District Hospital/higher health care facility
District Hospital	Diagnosis and management of cases of CVDs, Diabetes, COPD Stroke and Cancer (outpatient, inpatient and intensive Care) including emergency services particularly for Myocardial Infarction & Stroke. Lab and diagnostics: Blood sugar, Lipid, KFT, LFT, X-Ray, ECG, USG ECHO, CT Scan, MRI etc (Outsourced, if unavailable) Referral of complicated cases to higher health care facility. Health promotion for behaviour change and counselling. 'Opportunistic' Screening of NCDs including common cancers (Oral, Breast and Cervix). Follow up chemotherapy in cancer cases, Rehabilitation and physiotherapy services.
Medical College	Mentoring of District Hospitals Early diagnosis and management of Cancer, Diabetes, CVDs and other associated illnesses Training of health personnel, Operational Research.
Tertiary Cancer Centre	Mentoring of District Hospital and outreach activities Comprehensive cancer care including prevention, early detection, diagnosis, treatment, palliative care and rehabilitation. Training of health personnel & Operational Research

e. Capacity Building to provide NCD services

Currently, all states are in the process of setting up a structure to provide NCD services in the form of State and District NCD cells, District and CHC level NCD Clinics, Cardiac Care units and Day Care Centres. Towards this end, capacity building of Medical Officers, Nurses, ASHAs and ANMs on NCD is being done, mainly through modules designed by NHSRC and SHRC. NHM also reports a massive training drive on NCDs for the population-based screening exercise; reportedly 1.08 Crore persons have been screened for diabetes, hypertension and three major cancers - oral, breast and cervical. Tamil Nadu has started an awareness drive with some initial PHC patients to form patient peer groups. WHO is also working with UNDP and PHFI to organise a training programme for Medical Officers on NCDs.

Issues in capacity building of Frontline workers

Several critical systemic issues on capacity building of frontline workers need to be addressed.

The face of the Health System at community level are the Accredited Social Health Activist (ASHAs) and the Auxiliary Nurse and Midwife (ANM). One ASHA is placed for about 1000 population in plains, about 500 population in hilly areas, and for about 2500 population in urban areas. For every 10—20 ASHA, some states appoint one ASHA facilitator for handholding support to the ASHA. An extensive programme to train ASHAs and ANMs on NCDs is being rolled out, as ASHAs are seen as critical to achieving behaviour change and monitoring of NCDs with communities. The NPCDCS lists the following key functions of ASHAs at Sub Centre level for Prevention, Screening, Control of Common NCDs:

- Population Enumeration, create individual health records; complete Community Based Assessment Checklist
- Community mobilization and Health Promotion; Screening at community or sub centre level
- Using a scoring system, they will identify population to be screened by ANM, who will refer suspected patients of any NCD to Medical officer at Primary Health Centre
- Post-diagnosis, follow-up with diagnosed NCD patients; ensure adherence to treatment plan, lifestyle counselling
- Identify warning signs of complications and refer to appropriate facilities
- Maintain records and registers as necessary; Support the ANM in her tasks related to the NCD prevention
- The target population for this programme are all adults (women and men) aged 30 years and above .

However, ASHAs face several problems in implementing the above brief:

- The rapidly increasing workload of ASHAs is a major issue. They are made responsible for every "community-based" and multiple orientations by various vertical disease based national programmes.
- Very often, they have poor orientation about the health issues being covered of the many community health initiatives and surveys demanded from them, considering their low level of formal education.
- A study in Maharashtra found that awareness of ASHAs about their roles and responsibilities were inadequate due to work burden and lack of adequate training, support, and guidance from PHC staff.
- ASHAs also report unclear reimbursement policy and poor and delayed incentives, sometimes for many months.

Despite the above constraints, the ASHA programme could motivate and empower local women on community health. The desire to gain social recognition, a sense of social responsibility and self-efficacy enhances their motivation. Linking incentives directly with each activity ensures performances of the ASHAs. ASHAs need supportive supervision and mentoring, skill and knowledge enhancement and enabling working modalities . Some good examples of mentoring ASHAs are available that can be integrated (see Box 6 below):

Box 6: Mentor Nurse Training Program in Chhattisgarh

Mentor Nurse Training Program is a joint capacity building initiative of Ekam Foundation and UNICEF in Chhattisgarh. The Chennai based Ekam foundation is a not-for-profit (NGO) organization that works towards providing quality healthcare to needy children and mothers in India. Under the above program, capacity building of existing staff nurses of CHC and PHC are undertaken through nurse mentoring approach. The aim of the program is to upgrade the skills of all the nurses who are placed at CHC and PHC of intervention blocks and to enhance availability, utilization and quality of critical services at public health facilities. The programme trains "mentor nurses" under an intensive training of 57 days in obstetrics, neonatology, paediatric, behaviour change management, data collection techniques and monitoring of field staff nurses. These mentor nurses then visit CHC and PHC facilities and provide on-the-job training to staff nurses mainly on clinical skills and program management. Staff nurses are also trained on skill lab stations with help of mannequins. These mentor nurses also provide mentoring & hand-holding support to staff nurses.
~ Ekam Foundation, Chennai

f. Comprehensive package of services through H & WC

The recently launched Comprehensive Primary Health Care programme, linked to Ayushman Bharat Programme has been much appreciated by various actors as a step towards Universal Health Care. The Parliamentary Committee on MoHFW says:

"The Comprehensive Primary Health care includes the delivery of a package of preventive, promotive, curative and rehabilitative services delivered close to communities by health care providers that are sensitive, have an understanding of local health needs, cultural traditions and socio economic realities, and are able to provide care for most common ailments, referral for doctor or specialist consultations and follow-up treatment. Comprehensive Primary Health Care is the first major movement towards India's path to Universal Health Coverage (UHC), a target and basis of Sustainable Development Goal 3"69.

A critical component of Ayushman Bharat are the Health and Wellness Centres (H&WC), a mechanism is available for health promotion in communities. Nearly 150,000 health and wellness centres are to be set up across the country under the Ayushman Bharat scheme, benefitting about 550 million people. The range of services available under H&WC are:

1. Care in pregnancy and child-birth.
2. Neonatal and infant health care services
3. Childhood and adolescent health care services.
4. Family planning; other Reproductive Health services
5. Manage Communicable diseases incl. National Health Programmes
6. Manage common Communicable Diseases and Outpatient care for simple illnesses and minor ailments
7. Screening, Prevention, Control, Management of NCDs
8. Care for Common Ophthalmic and ENT problems
9. Basic Oral health care
10. Elderly and Palliative health care services
11. Emergency Medical Services
12. Screening & Basic management of Mental health ailments

However, budget for H&WC has been a constraint; a budget of Rs.1200 Crore was allocated for the same in 2018-19, which was insufficient. As a result, only 10,000 H&WC were functional by March 2019 against target of 15,000. Similarly, under the National Health Protection Mission (NHPM) , a budget of Rs. 2400 crores was allocated in 2018-19 covering insurance premium for roughly 50 crore individuals, against NITI Aayog's estimation of Rs. 10,000 crores for the sustainability of the scheme .

g) Financial protection of the poor for NCD healthcare through Ayushman Bharat

By July 2019, only 18% of people in urban areas and 14.1% in rural areas were covered under any

kind of health insurance scheme , pushing 7% of population below poverty line annually (see section A.3.3.b. above). Ayushman Bharat, a health protection scheme launched by GoI in 2018, provides a cover of Rs. 5 Lakhs per family to about 100 Million households in India. The scheme is part of a two pronged strategy by the government: a) upgrading existing Health and Wellness centres and b) the Comprehensive Health Protection Scheme providing health insurance cover for secondary and tertiary care.

Concerns about Ayushman Bharat

Several concerns have been raised on Ayushman Bharat and earlier health insurance scheme benefits to the poorest:

1. Faulty Eligibility Criteria: The Below Poverty Line (BPL) lists have been the earlier basis for determining eligibility, which was faulty and outdated, leading to exclusion of newly impoverished families while inclusion of uplifted ones. Ayushman Bharat uses the SECC database for inclusion in the scheme, gaps in which are reported to have excluded 854,440 deserving households in Uttar Pradesh alone. Only 57% households were found to be enrolled in RSBY and less than 12% were able to get hospitalisation cover.

2. Uncovered OOP Expenses: Out of pocket healthcare expenditure is 64% of total health expenditure and causes 7 percent of population slipping below the poverty line; medicine purchase being the largest expense.

3. Inadequate health infrastructure: Rural Health Statistics, 2017, reports a shortfall of 32,900 SCs, 6,430 PHCs and 2,188 CHCs in rural areas. Only 7% of SCs, 12% PHCs and 13% CHCs functioned as per Indian Public Health Standards. India also has just over 0.9 hospital beds per 1,000 persons, compared to world average of 4 beds per 1,000 persons.

4. Unregulated costs of private hospitals: Private hospitals charge almost 4 times Government hospitals. Despite this, only 17 of 36 states/UTs have adopted Clinical Establishments (Registration and Regulation) Act, 2010, which enforces registration and regulation of all clinical establishments and guarantees minimum standards of facilities and services.

5. Lack of customer awareness generation: Commercial insurance companies and third party administrators have limited interest in awareness generation and enrolment, leading to underutilization of schemes.

6. Unfriendly treatment at hospitals: Beneficiaries of public insurance schemes report shoddy treatment in hospitals as most of the insured are poor, uneducated and gullible.

7. Insufficient Financial Cover: Average medical expenditure in a private facility is Rs.25, 850, more than four times the average public hospital expenditure of Rs.6,120 .

8. Provides comparative advantage for private sector hospitals: Government financed health insurance scheme offer opportunities to private hospitals owing to their following inherent strengths:

a. Numerical dominance: Private sector facilities account for 74% of total hospitals in India

b. Public preference: Despite medical expenditure in private hospitals being 4 times that of Government facilities, 72% of rural and 79% of urban population chose private hospitals for treatment . Since inception, 64% of total 31.1 lakh admissions have been in private hospitals under Ayushman Bharat.

c. Greater empanelment for private Hospitals: A larger share of empanelled hospitals under government health insurance schemes belong to private sector (e.g. 50% under National Health Protection Mission are private).

d. Growth prospects for private health insurance: CRISIL estimates that the NHPM will increase penetration of health insurance in India from current 34% to over 50%, and will provide growth opportunities.

9. Other models of successful healthcare programs in India

Kerala is the best performing state on NITI Aayog's Health Index . The state extends the cover of RSBY to its entire population (BPL and APL) through its Comprehensive Health Insurance Scheme(CHIS).The scheme is

implemented in all government medical colleges, institutes of child health, dental colleges, regional institutes of ophthalmology, general hospitals, district hospitals and specialty hospitals.

Tamil Nadu is another bright example of a well-functioning healthcare system. The state implemented the Central Government's Multipurpose Workers Scheme in 1980 and appointed Village Health Nurses to deliver maternal and childcare services, yielding significant improvements in antenatal/ postnatal care, institutional delivery, immunization, etc. The state has greatly expanded PHC and SC coverage, offering round the clock services in PHCs. The Tamil Nadu Health Systems Project (has vastly made health services and medicines) available at very nominal costs to the lower socioeconomic strata.

g. Concerns on Health Systems: Most of the other gaps in the health systems will also plague work on NCDs – e.g. low overall health budgets coupled with under-utilisation of the same (e.g. in 2015-16, utilisation of MoHFW budget was only 73.07%); very high OOP expenses among the poor coupled with poor insurance cover; mismatch between NCD incidence and budget; lack of infrastructure and trained personnel; predominant preference for private treatment; low state health budgets; trainings of frontline workers done in silos rather than in a holistic manner as required by NCDs and lack of mentoring; emphasis on curative rather than preventive health, etc. In addition, integrating NCDs more strongly into medical education is a major gap (see below).

h. Integrating NCDs into Medical Education

Respondents noted that one of the major gaps in the ability of the medical profession to respond more holistically to NCDs is the overarching emphasis on disease as against an emphasis on health and Maternal and Child Health. An important manifestation of this emphasis on area for intervention is the area of Medical Education, which focuses almost exclusively on diagnosis and treatment of diseases, rather than the preventive aspects. Medical Officers may need to be refreshed about NCDs and good examples of the refresher courses are available – e.g. PHFI has initiated short refresher courses for Medical Officers, reportedly greatly valued by mid-career medical officers . Inadequate inclusion of preventive aspects on NCDs in Medical curriculum is an urgent gap that needs to be filled.

C.4.3. Surveillance, Monitoring, Evaluation and Research

WHO India office has been a critical player in ensuring that data systems on various diseases (including NCDs) are collected and the quality ensured. As a global agency, the Government also draws upon WHO's technical support for designing such systems. Following are some initiatives by GoI supported by WHO India:

a. National Non-communicable Disease Monitoring Survey

From Oct 2017, a National Non-communicable Disease Monitoring Survey(NNMS) is being conducted in 300 Urban and 300 Rural primary sampling units (20 HH in each unit) by the ICMR and NCDIR with support of MoHFW . The 10 targets and 21 indicators of the National NCD Monitoring Framework will be covered. Year 2010 will be taken as a baseline and progress on the NCD targets will be assessed in 2015, 2020 and 2025. 10 implementing agencies will implement the survey across 27 states of India. The survey focuses on NCD risk factors mainly tobacco consumption (both smokeless and smoking), harmful intake of alcohol, dietary habits, dietary salt intake, physical measurements, physical activities, body mass index, fasting blood sugar and blood pressure.

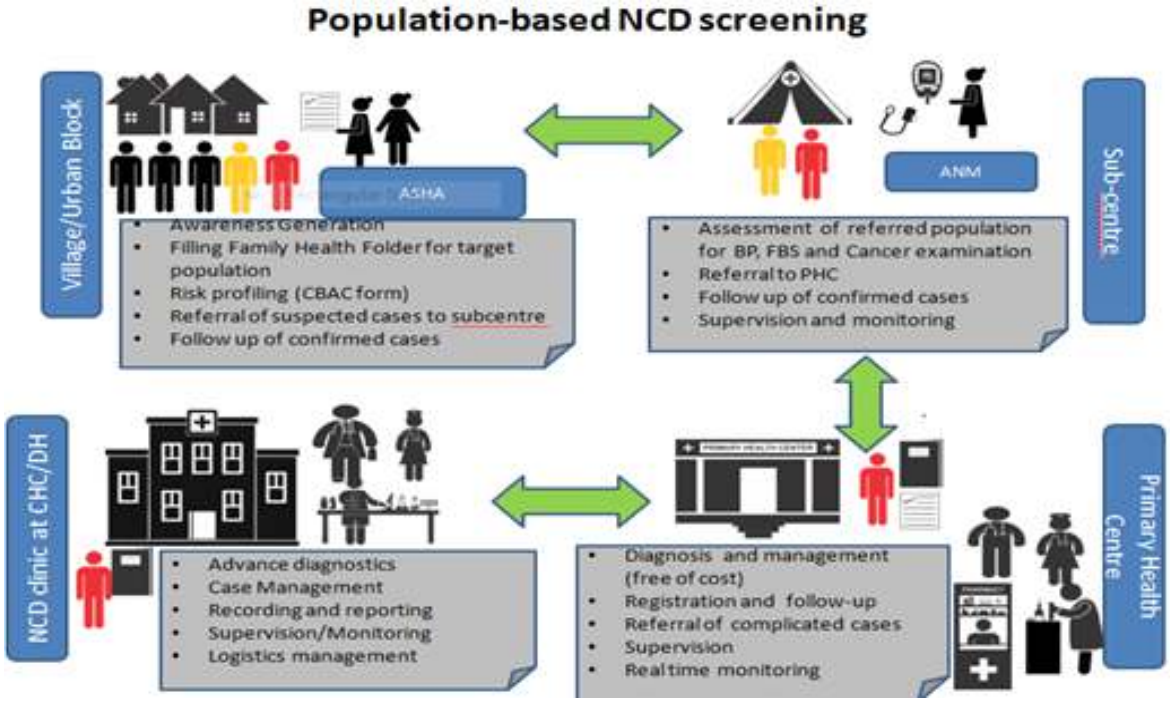
b. Population based screening for NCDs

Various States and Private Institutions (e.g. Fortis Cancer Institute) have been undertaking facility based screening on NCDs. Recently, Population based screening has been given a push by the NPCDCS. The Indian Government launched a programme for Population Based Screening on NCDs in 2014 and India has now started generating large scale actionable data on incidence of NCD.

NHM reports that Population based Screening for common NCDs is being rolled out in 24,016 SCs across 219 districts. By 31 Dec 2018 10.8

Million persons above 30 years of age are reported to have been screened for common NCDs – Diabetes, Hypertension, Oral, Breast and Cervix Cancers and NCD risk factors, and suspected cases have referred to PHC. The screening is done through ASHAs using Community Based Assessment Checklist under the NHM.

6 states are using their own software for screening while 21 states are using GoI NCD Screening app on handheld devices. Training Modules have been developed for training of various categories of health staff viz. Nurses, ANMs, ASHAs and MOs. 155,084 ASHAs, 37,584 ANM/MPWs, 10,135 Staff nurses and 11,024 Medical officers have been trained on PBS of common NCDs. The flow chart from screening to referrals for treatment is shown in Figure 15 on next page. The screening software, developed in association with WHO India, Tata Trusts and Dell, captures individual patient-wise data and ensures case management. The software has a tablet based application for ANM and a web based software for PHC and above. Data collected so far reveals that 8.1% of screened population is suspected to be Diabetic, 9.8% to be Hypertensive and 0.9% with any of three common cancers– oral, cervix and breast. (Source)

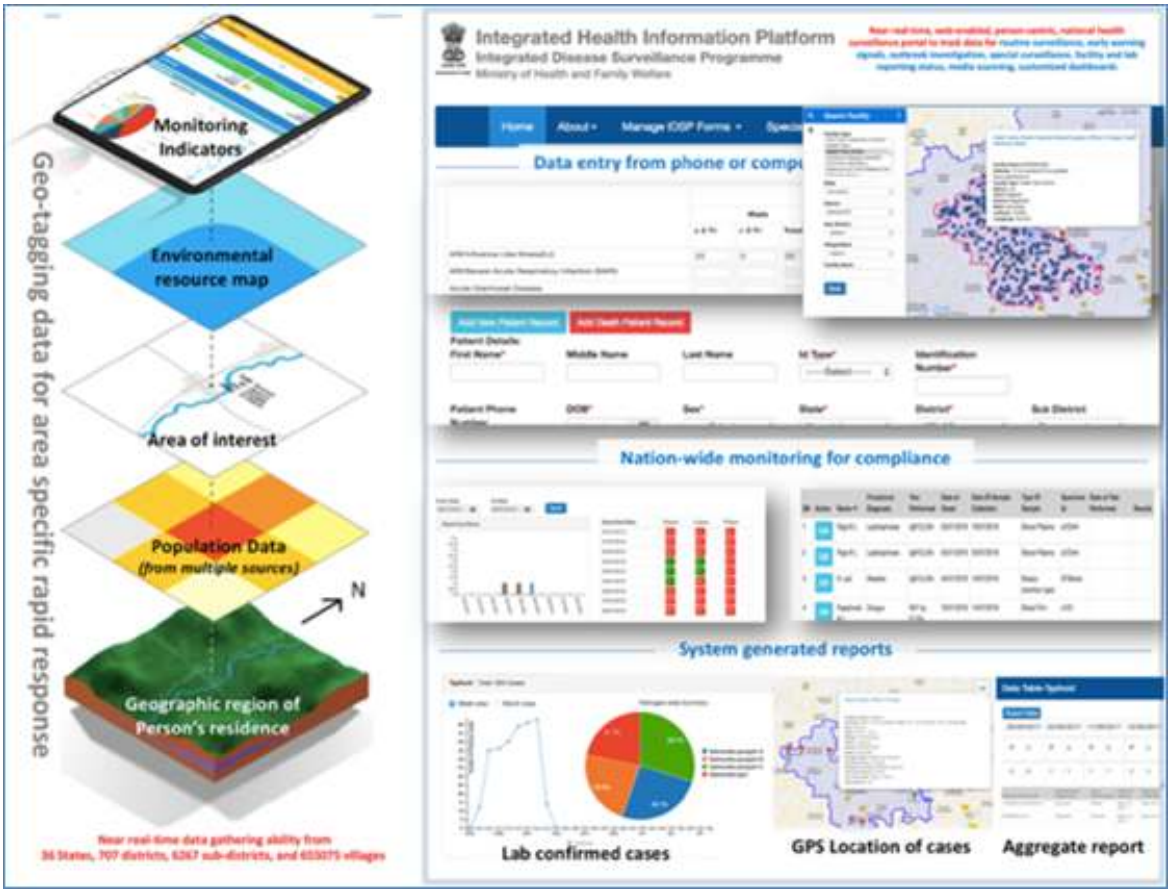


Despite the above efforts. States face resource challenges both in screening and in motivating patients found NCD positive in visiting PHCs for treatment. Respondents also report that vast health data is collected consuming many person hours of health staff. However, most of this data flows from communities to the national HMIS, but is rarely used to enhance implementation. Reliability is another issue about this data collected.

c. Health Management Information Systems

WHO India has also been a critical player in ensuring that data systems on various diseases (including NCDs) are collected and the quality ensured. GoI draws upon WHO's technical support as a global agency while designing such systems. WHO India supported MoHFW to roll out an Integrated Health Information Platform which will track data on both communicable and non-communicable disease platforms.

Two recent examples of such initiatives are WHO's support to the new HMIS and the Integrated Disease surveillance programme. The Integrated Health Information Platform, in which again WHO India provided technical support, consists of a single operating platform of the health data and information of India. The Integrated Disease Surveillance Programme using IHIP now has over 90 000 users and has more than 1.81 million case records (as on 4 July



2019) since its launch in seven states on 26 November 2018. The platform allows users to collect disaggregate public health surveillance data at all levels; Monitor more than 33+ health conditions; link real-time case-based surveillance, clinical data, lab data, health emergency data in a single platform; provide analysis on mobile and electronic devices; integrate with other ongoing state-specific surveillance programs and geographical analysis to identify hot spots where particular disease is more prevalent, and help plan interventions more effectively. (Figure 16 on left).

The IHIP will link to various Electronic Surveillance systems for Communicable Diseases - Integrated Disease Surveillance Program (IDSP), National Vector-Borne Disease Control Program (NVBDCP)(NAMIS), Revised National TB Control Program (RNTCP) (Nischay), National AIDS Control Program (NACP) , National Public Health Surveillance Program (NPSP), National Leprosy Eradication Program (NLEP) (Nikusht)- as well for NCDs - National Program for Prevention & Control of Cancer, Diabetes, Cardio Vascular Diseases and Stroke (NPCDCS), National Mental Health Programme, National Program for Control of Blindness, Trauma and Injury Surveillance.

The new HMIS website collates Health related data from Health Management Information System (HMIS) and other sources e.g. National Family Health Survey, District Level Household Survey, Census, SRS, etc. (Figure 17 below).

C.5. Question 5. Work by WHO India with UN Partners, CSOs and Academia

How did the WHO India work with other agencies like UN partners, civil society, academic a?nd research organizations to support the achievement of NMAP?

Good Progress. Well Done!

Reason for rating: During formulation of NMAP, WHO India established links with about 13 target ministries. Further, during work on NCAP, this number has expanded. Thus WHO India has expanded relations with MoHFW and non-health ministries.

Among UN agencies, WHO India worked mainly with UNDP, UNFPA, UNICEF on NCDs. WHO India forged links with UNDP India (through the Inter-Agency Task Force on NCDs) to support MoHFW on NMAP. UNDP India will be supporting MoHFW in coordination on the NMAP while WHO will be providing technical support and working closely with DGHS.

WHO India also achieved several policy-wins by involving CSOs and supporting them for strengthening coalitions. E.g. the Healthy India Alliance's advocacy for increasing GST on Sugar-Sweetened Beverages has helped to change policy on the same.

C.5.1. Joint Programming with UNDP on NCDs

WHO India is part of a joint programme with UNDP, as part of the UNIATF initiative (Box 7 Below).

Box 7: The United Nations Interagency Task Force on the Prevention and Control of Non-communicable Diseases

"The UNIATF on the Prevention and Control of Non-communicable Diseases was established by the UN Secretary General in 2013. Its role is to bring the United Nations system together to tackle non-communicable diseases (NCDs), mental health and other non-communicable conditions. It uses its networks and expertise to help governments develop and introduce effective responses to prevent and control NCDs. It provides high quality technical support to enable governments across the world to develop and implement multisectoral action that is aligned with broader national development plans.

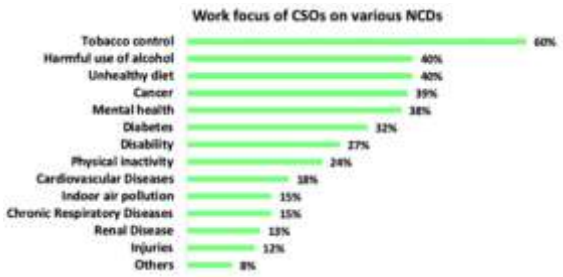
Bringing together over 40 UN agencies as well as the World Bank and regional development banks, the Task Force promotes a whole-of-government and whole-of-society approach. In catalysing action for NCDs, it moves countries a step closer towards universal health coverage and the Sustainable Development Goals".

Source:[70]

In India, for the UNSDF, WHO India leads the Health Results Area and works jointly with UNFPA and UNICEF. On NMAP, a joint programme with UNDP has been started. UNDP will support the coordination function while WHO India will continue to be the lead technical partner on NCDs. Consultants will be placed in MoHFW and all other target ministries identified in the NMAP, who will be responsible for ensuring coordination to ensure NMAP deliverables are achieved.

C.5.2. WHO India's partnerships with Civil Society to address NCDs

Background: WHO India has had several policy wins through its work on NCDs. On tobacco, the involvement with CSOs has been long and well-documented. WHO India did a mapping of NGOs working on NCDs and supported the formation of Healthy India Alliance, a network of NGOs working on NCDs. The mapping showed that since 2000, nearly 70% of the Health CSOs have started working on NCDs, reflecting the salience of the issue. Figure 18 below depicts the proportion of CSOs working in India on various NCDS:



Results of CSO mapping on NCDs

- Around 64% of CSOs are involved in public education activities, while 49% in patient services.
- Only 26% of them are involved in advocacy for improved policies, 13% of them for technical support to Government agencies, 11% in media advocacy, etc.
- CSO activities also vary across specific NCDs. While there is much focus among diabetes organisations on awareness and early diagnosis, the cancer community is active in patient related support. Similarly, cardiovascular disease CSOs focus more on primary prevention.

CSO Alliances on NCDs

- WHO South-East Asia Regional Office (SEARO) convened a Consultation of CSOs, in July 2015, to devise strategies to advance NCD prevention and control in the Region and the role that CSOs can play in this domain. The NCD Alliance, a coalition led by seven international NGO federations convened an Indian civil society roundtable and asked for proposals for a multi-disciplinary CSO coalition in India to strengthen NCD action. Following this, a group of organisations working on NCDs in India volunteered to form the Healthy India Alliance.
- The Alliance organised the First National Civil Society Consultation on NCDs in India in Apr 2016 in New Delhi, in collaboration with WHO India, the NCD Alliance and the American Cancer Society (ACS). The meeting provided CSOs a combination of capacity building, information and networking sessions and facilitated a concrete way forward to augment CSO engagement for NCD prevention and control.
- The Second National CSO consultation on NCDs was held in Delhi in Jul 2017. It stressed the need for a multisectoral collaboration for prevention and control of NCDs in India and envisaged following roles for CSOs:
  - o Develop CSO engagement guidelines in the National NCD response
  - o Collect voices from the Field, case studies based on initiatives taken by CSOs across India
  - o Set up robust accountability and surveillance mechanisms on NCDs
  - o The CSO mapping by WHO India indicated these broad areas where CSOs play a role: Awareness, Capacity Building, Advocacy, Access to health care services for less accessible and high risk groups, monitor and report on implementation of NCD programmes.
- The key recommendations from the above consultations are given in Box 8 below.

Box 8: Key Recommendations from CSO Consultations on NCDs

- Urgent need for meaningful and concrete CSO engagement for NCD prevention and control in India, and ensure equal participation from health and non-health CSOs
- Need to address NCDs from non-health and developmental perspective to provide novel strategies for prevention and reduction of risk exposure.
- Need for concrete action-oriented guidelines for CSO engagement within the NMAP (similar to those included in operational guidelines for National Tobacco Control Programme). The Healthy India Alliance proposed to develop these guidelines and submit for perusal to MoHFW and WHO.
- Some key action areas that emerged: Patient engagement, people's participation in advocacy; mental health; focus on special groups (esp. children and youth; women and elderly); curbing promotion of industry driven risk factors (unhealthy foods, sugar sweetened beverages; tobacco; alcohol and environmental health) and comprehensive behaviour change campaigns.
- Need to advocate with Government to ensure effective utilization of budget to improve efficiency in spending and enhance outputs/outcomes.

- Urgent need to prioritize health sector; State governments to be motivated, assisted to develop health financing systems
- Need for comprehensive and diverse system of health care financing that pools financial risks and shares the cost burden to make existing systems more efficient
- Adopt a balanced mix of public-private partnership in health insurance coverage
- Need to formulate regulatory government policies to finance outpatient coverage and prescription medicines
- Need to incentivize the private insurance sector in order to encourage its participation in covering efficient healthcare services to masses at affordable rates
- Marketing of unhealthy foods and beverages to children needs immediate action, it is immensely affecting children. Advocacy for legislative action on nutrition labelling and advertising.
- Health promotion should happen at three levels: school, community and workplaces and at a large scale.
- Patient involvement in management of these diseases in very weak, they are passive participants during the entire course of treatment and management. They need to be supported to become active participants.
- Work on NCDs is an important role each CSOs is tasked with; the reach and penetration of CSOs at community level results will be a boon for communities.

Source:[74]

Annex 6 lists CSO initiatives on Diabetes, Cancer and the Tobacco control efforts in Mizoram. Annex 7 lists some of the major CSOs and their contribution on NCDs. A good example of CSO advocacy for higher taxes for sugar sweetened beverages is given in Box 9 below.

Box 9: Standing Up to Industry to Secure Higher Sugar-Sweetened Beverage Taxes

"As a major contributor to obesity and diabetes, the over-consumption of aerated or carbonated and high-sugar drinks is a serious public health concern in India. The Indian Government launched a new unified GST regime on 1 July 2017. As the single biggest tax reform undertaken in India in 70 years of independence, the GST was an important opportunity for the HIA to garner attention and visibility for the issue of SSB taxation in order to achieve the national NCD target of a 0% increase in the prevalence of diabetes and obesity.

A GST council was set up under the chairmanship of the Indian finance minister, comprising finance ministers from all Indian States and Union Territories and other senior officers from the Indian finance ministry. Its mandate was to determine the GST tax rates for various commodities and services.

As the GST proposal was undergoing several rounds of discussions, civil society organisations hailed suggestions to earmark SSBs as 'sin goods' and bring them under the highest tax bracket. However, the food and beverage industry strongly urged the government and the GST council to re-consider this proposal and resist pressure from health advocates. Much like the case with tobacco control, the industry argued that this tax increase would be unfair to consumers because the price of SSBs would substantially rise, consequently impacting the industry's growth and livelihoods.

In response, HIA members agreed on and submitted a joint representation in the form of a letter to different government departments including the GST council, the ministry of health and the Food Safety and Standards Authority of India (FSSAI) to express support for the new tax regime and calling for its successful implementation.

The letter strategically put on record the public health significance of the highest possible taxation under GST (43%) as a critical policy measure for NCD prevention and control in India. This was an important and strategic opportunity for the HIA to demonstrate strong civil society support for substantial taxation of SSBs and thwart attempts by the food and beverage industry. Ultimately, the GST council announced a 40% tax on SSBs (28% GST+12% cess) in line with the HIA's request.

Moving forward, the HIA has plans to observe and record any tactics that are being adopted by SSB companies in order to inform the next stage of advocacy under this initiative. This is also an opportunity to devise an action plan to broaden the scope of the HIA's activities to bring the broader issue of unhealthy food and beverages within the remit of its ongoing and future campaigns".

C.5.3. Results of qualitative analysis of interview data

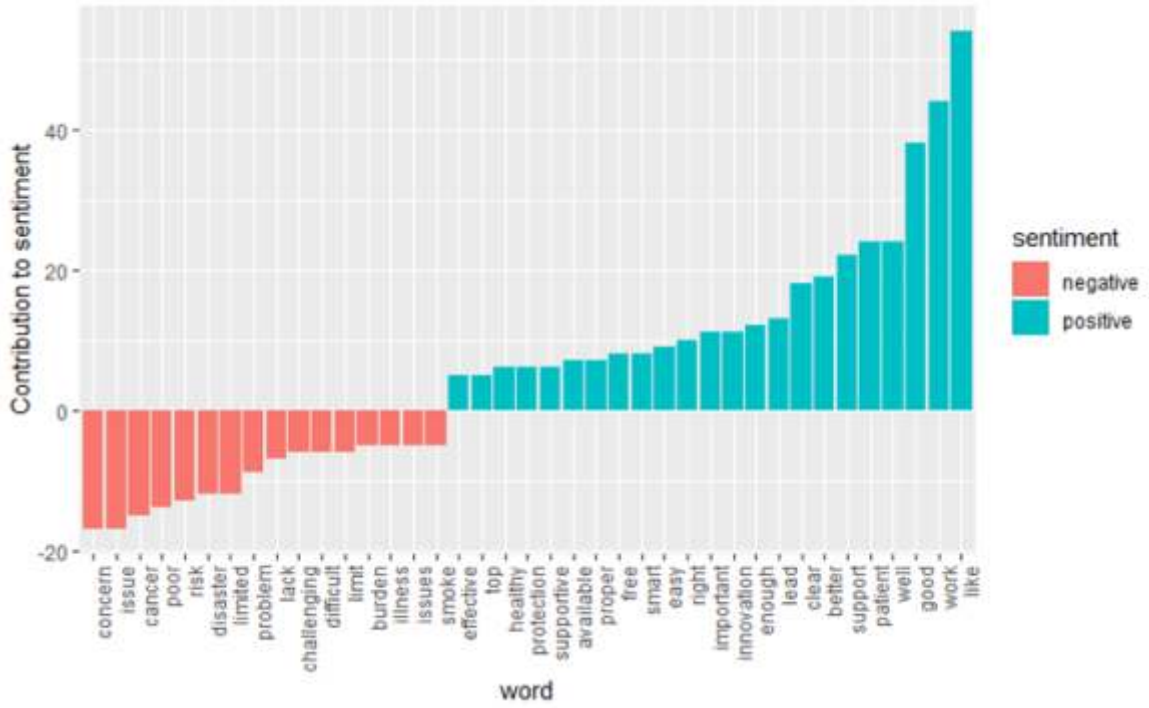
Following are the results of the qualitative analysis of interview data:

a. Word Cloud of Interview data

Following are the major themes that emerge from a word cloud analysis:

b. Sentiment Analysis

The sentiment analysis of interview data revealed a largely positive feedback about WHO India's work on NCDs:



C.6. Question 6. Lessons Learnt

What are the main lessons learned to take into account for the WHO's engagement?

C.6.1. Main Strengths, Weaknesses, Opportunities and Threats for NCDs which WHO India needs to address

We present below, a SWOT Analysis of the situation on NCDs .

a. Strengths in the Current NCD Scenario

- WHO India enjoys an unmatched reputation as the go-to agency on Health in India. It is known for setting health standards, informing national policies through global and local research and providing technical support on a wide range of health issues. reputation gives WHO India an unmatched leverage with Government, CSOs and Health Professionals, which it can use (and has used) very effectively for NCDs
- WHO India is already a well-respected partner in design and implementation of number of programmes on NCD – e.g. NPCDCS, NTCP, NMHP, NPHCE, NOHP, NAPC and NPPC. The GoI and most state governments have shown a clear intention to implement these and other programmes on NCD rapidly. In most states Population Based Screening has started, and NCDs have rapidly become more of a priority.
- WHO India's support to the formulation of the NMAP, and the Inter-ministerial multi-stakeholder mechanism has been critical. This initial step has paved the way for much future action on NCDs at national and state levels.
- WHO Global Action Plan and SDG 3 are frameworks accepted by GoI, which has demonstrated keenness to adhere to the same, thus giving WHO India much space for advocacy.
- WHO India has a close relationship with Medical Research and Surveillance organisations such as ICMR, PGIMER, NCDC, etc. which it can capitalise to strengthen data and surveillance systems for NCD in India.
- WHO has a considerable repository of experience internationally and nationally on supporting multi stakeholder responses to various issues – e.g. Tobacco, HIV/AIDS, Polio programme, etc. – which can be leveraged for NCDs.
- WHO India is also seen as an unbiased agency, and an "honest broker". This acceptability is critical in building multi-stakeholder platforms for action on NCDs. It thus provides a forum to match demand and supply on NCDs in India.
- WHO India has also a good relationship with strong CSOs and their networks and has developed a well-defined policy advocacy constituency.

b. Challenges/ Weaknesses/ Gaps in the current NCD Scenario

Strategic Area 1: Integrated and Multi-sectoral Coordination

- Inadequate Joint Ownership: Some ministries still see NCD as a Health Ministry Issue, and sometimes have conflicting priorities. There is also inadequate Joint Accountability for reaching the goals of the current multi-stakeholder mechanism for NMAP. WHO India could advocate for reporting of NMAP to a higher authority – e.g. NITI Aayog.

"In the NMAP model, there are multiple stakeholders, and issues like tax, pollution, road traffic etc. all related to other ministries. The Health ministry is the line ministry to take care of health related issues, but has no leverage with other ministries to convince them to take up appropriate action on other issues. Unless there is pressure from the top nothing will happen.

Secondly, the Health Ministry is already so busy implementing service delivery. Where is the time or staff to coordinate with other Ministries? And even in other ministries, there is no focal point with whom we should coordinate. We need dedicated staff to help us coordinate on NMAP."
~ MoHFW senior staff

- The current emphasis on NCD at the MoHFW is focused on grappling with the service delivery aspects of NCDs, as against the coordination and advocacy required with other Ministries and Departments envisaged under the NMAP. MoHFW staff expressed a scarcity of resources to carry out such coordination function with other Ministries as per the NMAP. In this context, the WHO-UNDP initiative to support in coordination for NMAP has been welcomed.
- Engagement of Elected representatives at Central and State level on the NCD issue is still weak, even though the Parliamentary Committee on H & FW has been pushing the Government for more urgent finances and action on the NCDs. WHO India could ensure building up a wider constituency with Parliamentarians.
- Fund Constraints: The combined public health expenditure was 1.4 % of GDP against a world average of 5.99% and against a target of 2.5% of GDP by National Health Policy 2017. This has also translated into a scarcity of resources available for NCDs, and is a major difficulty in scaling up the action on NCDs . This is again an issue for larger advocacy for WHO India and its allies.
- Donor funding: The issue of NCD is not yet attractive to donors. Thus, despite being the leading cause of morbidity and mortality worldwide, NCDs have not received the same political or financial attention from the global health community as other conditions, such as HIV/AIDS. NCDs have received only 1.7% of the US$37.6 billion in development assistance for health in 2016. This has hampered the pace of change that could have been achieved. Advocacy with donors to increase support to NCDs – which is already the biggest epidemic globally - is a critical area for WHO and other UN agencies to prioritise in the coming years.

Strategic Area 2: Health Promotion

- In general, the current systems and practices have been traditionally targeted at promoting and tracking the identification and treatment of communicable disease and maternal and child health. The area of NCD, being relatively new as a priority for the Health system, needs to be strengthened in various ways for NCDs.

"We don't have funds nor have expertise for IEC/BCC. Community awareness is one of the biggest challenges which I am facing here, we don't have any IEC cell under NHM, one IEC consultant we have but she is on leave for the last six months. We have only 5 Lakhs rupees for IEC in NHM and we have 30 programs under this umbrella. With this small fund we are only able to organise only some 'day specific events'. ~ Dr. Eric Zomawia, Mission Director, NHM, Mizoram

- Both on demand and supply side, much needs to be done for promotion of "Best Buys". A number of Ministries have expressed constraints and differing priorities than those required for NCDs
- Major Health Promotion Centres such as NIHFW and State Health IEC departments report a resource shortage
- Rapid behavioural change leading to increased consumption of HFSS Foods, lack of physical activity among large sections of the population and prevalence of other risk factors on NCDs are still a major concern
- Large number of CSOs and CSR organisations work in the Health Sector, but often in isolation, and experiences of only a small number of these inform policy design and programme implementation.
- Respondents - esp. from States – have reported a gap in their capacities (staff and skills) to design specific and targeted IEC tools on NCDs.

Strategic Area 3: Health Systems Strengthening

The Challenges of the Health Sector as a whole also affect NCDs and present a number of advocacy areas for WHO India (see section C.4.2.g. above). Additionally, following are some gap areas in the Health systems that need to be addressed:

"I think it will be difficult for India to achieve global targets by 2025 or 2030 at this pace. Just framing a policy document is not enough. Implementation of a policy is equally important. We need to work on infrastructure, need to have adequate human resource and equal distribution, every state must have essential medication list for all diseases related to NCD and every PHC must have these medications and a doctor who can prescribe these medicine to patients of that area. This is the least we need to do to achieve NCDs. You also need a frontline worker who can give patients their monthly dose and screen new patients. Basic medications for hypertension and diabetes must also be available in every PHC.

I don't think it is a question of budget also. A lot of the existing budget is under-utilised. It is also not about having one or two well-functioning PHCs in some states. We need to achieve a very large number of functioning health institutions at ground level. There is also the issue of out of pocket expenses. Poor patients cannot afford treatment, and they lose their wages in going to the hospital.

~ Dr. Desi Raju, Ex-Secy, MOHFW

- Health being a State subject, states are expected to pool in 60% of outlay for central schemes (10% in case of north-eastern states). The states are also to raise resources for their own staff and other expenses. However, many small States do not have the resources, thus affecting their ability to meet their health targets.
- Health infrastructure wise, most states are weak. For e.g. several states do not have a single State Cancer Institute/TCCC, despite the pressure that is faced by Tertiary Care hospitals.
- Training superstructure – Respondents felt that the training superstructure for NCDs has not yet developed to meet the needs of country. For e.g. the design of modules, training of trainers, scheduling and targeting of trainings – has been reported as a major gap that may affect meeting goals on NCDs. The current emphasis of training, and monitoring systems are designed for Maternal and Child Health. Also, preventive health has not been much emphasised in the past. Frontline workers report that the large number of siloed trainings they receive from different vertical programmes raise a tremendous burden, and also are often not presented in an integrated manner. Thus while the burden of trainings for frontline health workers is increasing, the holistic approach required for promotion of NCDs is reported to missing.
- Monitoring of trainings is another gap area. Respondents report that often the same medial officer, nurses and ASHA, ANMs get trained more than once, while some other staff do not get training at all. Also the outcomes of the trainings – not just increase in knowledge but conversion into changed practices – is tracked weakly.
- Another area of gap presented by frontline workers was hand-holding. Most of the current supervision is against a checklist of targets they are supposed to achieve. There are very few examples of hand holding of new ASHAs/ ANMS and mentoring of these workers. Where such mentoring programmes have been designed – e.g. the Mentor Nurse programme by Ekam Foundation in Chhattisgarh – the results have been excellent in building capacities and in sustaining motivation of frontline workers.
- Management of Health systems is a major gap. Doctors have often complained that they are forced to take up routine admin duties for which they are not trained. On the other hand, when such duties are sought to be transferred to administrative cadres (such as provincial civil services) doctors have protested. The health system needs strong and professional management, esp. on NCDs, given the scale and complexity of the actions and standards involved.

Strategic Area 4: Surveillance, Monitoring, Evaluation and Research

- Multiple data systems which do not "talk" to each other, non-reliability of data and non-use of data for decision-making at point of data collection have been key systemic constraints. Thus, various

sections in the Health System has been generating data in silos, and a collated overview of the entire Health situation – communicable and non-communicable was not easily available on one platform. WHO has recently supported GoI in developing the Integrated Health Information System, which will provide a platform for integrated monitoring and decision-making (Section C.4.3. above).

"Too much data is collected but rarely used for action. ASHA, ANM, Doctors, everybody is collecting data. In a country where we say health human resource is the biggest challenge, one third of the time of Health staff is spent in collecting data. Data flows from rural areas to New Delhi, but is untouched by the human mind. Data is a management tool, if you collect data from a district, it should be used to improve the implementation through a better approach from next month. Data should be utilised and discussed at the level at which you are collecting it. Reliability is another issue when it comes to Data". ~ Respondent (source protected)

- Data on at-risk population is still being collected under the Population Based Screening exercise. However, localised and contextualised evidence of patterns of risk factors and causation for NCD is needed for proper framing and design on NCD programmes. For e.g. data on behaviour related to risk factors needs to be included in Census and various surveys.

"We have not been able to get the health system to fully respond to NCDs yet. We need to understand that NCD care needs a far more robust system than any other infectious diseases or MCH program requires. In those programs you can get result by interventions with ASHA, ANM or through some training programmes with doctors. In NCD you require interventions in multiple sectors at the same time. If you design an NCD care programme only with doctors and nurses you will fail, it has to be with communities themselves. We need to empower the patients to understand and deal with NCD control and prevention, for e.g. through patient peer groups".

~ Dr. Yogesh Jain, JSS, Chhattisgarh

- Community Based Monitoring System for NCDs has not been developed fully yet in India, and can be instrumental in bringing ownership and accountability on NCDs. Some good examples of community based monitoring of health indicators are available from Thailand and Brazil.
- WHO India has been supporting GoI in several areas to strengthen health data systems and could consider working on filling the above gaps.

c. Opportunities for NCDs in India

- A major outcome of the process of finalisation of the NMAP has been that most of the inter-sectoral action points raised in the NMAP have been accepted by other ministries in principle.
- Additionally, a number of critical learnings from Tobacco control, Air Pollution, HIV/AIDS and other programs exist on how to make multi-stakeholder responses work, which can be leveraged for NCDs
- The NITI Aayog has taken a major initiative to develop a ranking system on Health for States of India. NITI Aayog may also be a good agency to provide upward accountability to NMAP.
- The Government of India has recently initiated significant interventions toward Universal Health Coverage such as Comprehensive Primary Health care, PMJSY, Ayushman Bharat, Yoga day, Fit India Movement, Eat Right India campaign, Health and Wellness Centres, Jan Aushadhi Kendras, all of which reinforce WHO India's efforts on NCD. Moreover, National and State Laws and policy measures exist for promoting healthy behaviour on NCD. Also, despite vacancies and shortages, the vast infrastructure in public health exists in India which can be strengthened and built upon for NCDs.
- Population Based Screening and treatment of NCD cases has begun in most states. India has thus started generating large scale actionable data on incidence of NCD; by May 2019, 10.8 Million persons aged

above 30 years have reportedly been screened for common NCDs – Diabetes, Hypertension, Oral, Breast and Cervix Cancers and NCD risk factors, and suspected cases have been referred to the PHC. This is also an opportunity to create a full-fledged movement on NCDs with communities.

- WHO has strong partnership with ICMR, PGIMER, NCDC, etc. to support GoI in enhancing surveillance systems, and is already member of technical committees to help design digital records on NCDs with Dell and Tata Trusts
- WHO has a good relationship with strong CSOs and their networks, and can develop a critical mass to develop a people's movement on NCDs. For e.g. many Institutions like Jan Swasthya Sahyog, Centre for Science and Environment, Tata Trust, Tata Memorial Hospital, etc. are already working on various aspects of NCDs, and can be (or are) critical partners in informing interventions and scaling up innovations by GoI and WHO India on NCDs.

"Since NCDs often require life-long management, the Committee is of the view that AYUSH has huge potential for safe and cost-effective management of NCDs. The Committee, therefore, recommends that the Department should exploit AYUSH strengths for the management of above NCDs". ~ Parliamentary Committee, 2018

"We need to adapt AYUSH for prevention. Private Hospitals have already started using it. Vedanta Hospital has started using it for medical care. We can start with schools, build in Yoga and AYUSH. People who are currently designing prevention systems are not coming from the AYUSH perspective. Health professionals look at WHO with respect so WHO can play a major role in changing mindsets on AYUSH". ~ Prof. Ritu Priya, JNU, Delhi

- Significant interest in Media on Disease prevention and on Health exists. There is an increasing trend of media visibility on NCDs. This can be channelized for enhancing Health Promotion. Similarly, use of Social Media and Digital marketing can greatly help in health promotion, advocacy and awareness. There is also a positive global and national trend of enhanced mass awareness on health through recent events such as World Yoga Day, campaigns of healthy eating and environment, etc.
- AYUSH is another rapidly evolving sector in India and the world, which can be built upon for preventive care.

d. Threats in the area of NCDs

- The India: Health of the Nation's States report points out that India's health system faces the dual challenge now of responding to a reduced but still considerable burden from communicable, maternal and nutritional diseases while at the same time responding to the rising NCD incidence. In the absence of adequate resources, both these areas are likely to suffer.

Box 10: Key facts about NCD prevalence in India

* Every 4th individual in India aged above 18 years is hypertensive
* Age standardised obesity increased by 22% from 2014-2018
* India has the world's 2nd highest number of diabetic patients
* Cardiovascular diseases (coronary heart disease, stroke and hypertension) account for 45% of all NCD deaths
* Probability of dying from NCDs between ages 30 -70 years is 26%

- The disease burden of NCDs in India is increasing rapidly and the Health System will need major efforts to ensure that the NCD epidemic is contained (Box 10 on left).

"India needs to take a large number of steps simultaneously if it is to achieve the global targets within the given time frame - 2025 or 2030 for SDG 3. For e.g. if we want reduce mortality, we have to figure out who are most at risk and what kind of interventions are needed for them. Improving package of practice at hospitals and universal health care across the country is an urgent priority". ~ Dr. Srinath Reddy, PHFI

• NCDs are more difficult to address than Communicable diseases because of their slow and invisible nature, linkages with cultural and behavioural aspects, and extreme difficulty in engendering behaviour change despite knowledge.

• Numbers and capacities of medical officers, para-medical staff, frontline workers and service providers needs to be rapidly increased without losing quality of instruction. This will require the best of innovative thinking and considerable resources, which do not seem to be available at this stage.

C.7. Question 7. Recommendations

Based on the learnings we have gathered above, following are recommendations from this evaluation for strengthening WHO India's work on NCDs:

C.7.1. Widen WHO India's current targeting and partnership strategy on NCDs

WHO India could expand the type and number of partners it works with currently to create a broader support base for advocacy and health promotion on NCDs. Such mutually beneficial partnerships could be with the following stakeholders:

Health Services	Proposed Targeting Strategy for WHO India
a. Elected representatives	**Forums of National and State Parliamentarians** can be strong allies in ensuring Health is prioritised in budgets and programmes. WHO India needs to enhance its engagement with elected representatives and their forums at both levels.
b. Civil Society Organisations	WHO India needs to take following steps to enhance CSO participation in NCDs: **Non-health CSOs** - Given the multi-sectoral nature of NCDS and that much of the preventive efforts for NCDs will take place out of the Health sector (e.g. in awareness about healthy diets or physical activity), non-health CSOs need to be urgently involved and oriented about NCDs. **CSO Coalitions** - Continue supporting (and expanding) CSO Coalitions on NCDs. **Community level CSO support structure -** To enhance community-level action and awareness on NCDs, a structure like that followed by NDMA (National and Regional level CSOs supporting community level CSO groups) could be advocated for.
c. Innovators	**Capturing and scaling up innovations** - Several innovations by CSR actors and CSOs in the Health sector have a great scope for scaling up. MoHFW also captures innovations by State and Central Government departments (some of which are on NCDs). WHO India could set up a system to capture such innovations coming from different parts of India and support piloting and scaling up the same in other areas. (See section C.1.3.b. for examples).
d. Organisations promoting awareness on NCDs	**Mass appeal organisations -** could be explored for a well-defined but mutually complementary role to scale up an agenda for increased physical activity. **Mainstream and vernacular media -** stronger and more strategic relationship with these media could enhance the quality and quantity of messaging on NCDs. **Corporate communication agencies -** at national and state level could help in meeting the gap in capacities at state level for IEC on NCDs. **Health awareness related campaigns -** such as Pinkathon, Cancer Marathon, Run for Cancer, Rahagiri, etc. to multiply awareness efforts by governments.

e. Information Technology stakeholders	**CSR partnerships with IT giants** - Innovations in IT related tools can create a strong buy-in, esp. of the younger generation. (e.g. Google Fit app). Partnerships with Apple, Google, etc. may be explored for promoting IOS or Android based apps and health alerts. **Micro learning** videos or gamification can be used to spread awareness and build capacities among adolescents and youth.
f. Pharma and Insurance companies	**Pharma sector** is a critical stakeholder for long-term work on NCDs and needs to be involved more. **Health Insurance industry** has a vested interest in promoting good health and could be a valuable ally. Health Insurance for Mental health, currently a major gap could also be explored with the same.

C.7.2. Continue supporting GOI and State Governments for strengthening health management systems

Targets	Proposed Strategy for WHO India for strengthening health management systems
a. Support for stronger Management of Health Systems	Traditionally in the health system, non-medical professionals have been seen as unsuited to manage Health programmes due to their "lack of medical knowledge". This has put the task of programme management in the hands of medical officers, who are rarely trained for this. Consequently, programme management (planning, tracking, inventory, trainings, deployment of resources, etc.) has faltered, report respondents. In recent times, disciplines such as Masters in Health Management and Masters in Hospital Management are focused at creating a cadre of professionals that understand both the Health sector and professional management. In the context of NCDs - which are multi-sectoral, multi-dimensional in nature - such professional management becomes even more important. WHO India could explore strengthening professional management of Health Systems.
b. Strengthening Data systems for NCDs	Numerous respondents emphasised that while enormous amount of health related data is collected by different national programmes in silos, most of these various data systems do not "talk" to each other, and are often not used at local levels to inform decisions. The improved HMIS and IHIP developed by GOI to streamline data systems through support from WHO India has been much appreciated. WHO India could also conduct a comprehensive data assessment from the angle of NCDs and identify gaps in current data collection and utilization processes and strategies to address these for comprehensive, reliable and quick data flow. Data on behavioural risk factors could also be integrated into national data collection systems such as Census.
c. Support development of Research Framework for data from Population based Screening	The Population based Screening (PBS) of NCDs has started generating a large amount of data on the prevalence of risk factors and NCDs from various states. This data can provide relevant learnings about the potential priorities areas in NCDs such as budget allocations and prioritisation of NCD wise facilities in various states and districts. WHO India may consider supporting GoI and the state departments in analysis of the PBS data and ensuring that the results are rapidly fed back to state and district level so that quick action is taken on the same. A system to analyse the data and disseminate could also be set up at regular intervals, e.g. on a quarterly basis. Data analysis methodologies are now available for predictive analysis of this data, which could help in planning NCD related interventions. This may also be considered by WHO India.

C.7.3. Continue supporting GOI and State Governments to strengthen capacity building processes for NCDs

Existing capacity building systems have been tailored towards communicable and MCH diseases. This may need to be revised to in the context of NCDs. Following are areas that WHO India may explore in strengthening capacity building for NCDs:

Capacity Building Targets	Proposed Strategy for supporting Capacity Building for WHO India
a. Assessing current training systems for NCDs	WHO India may support a comprehensive review to understand gaps in the current training systems – esp. from the angle of NCDs. A redesigning of the training superstructure for maximum retention and in such a way that transmission of concepts down the line does not lead to a loss of quality may be needed– e.g. using Kirkpatrick Model of training design. Similarly, systems for tracking training delivery and evaluation of trainings for quality are equally needed to be strengthened.
b. Support institutionalisation of incentives for capacity enhancement	A system to incentivise capacity building for various levels is needed. One way to deal with the shortage of trained manpower is to offer incentives to existing staff to upgrade their knowledge and skills through certified courses – e.g. Gujarat Health Department.
c. Capacities of Medical Officers on NCDs	WHO India (in collaboration with UNDP and PHFI) is initiating a pilot refresher training for Medical Officers on NCDs. Based on the results, WHO India may consider supporting the scaling up of such models for Health System practitioners to all States.
d. Capacities of Frontline Workers on NCDs	i. **Capacity building of frontline Health Workers:** Since the fight against NCDs will be fought in districts and communities in various states by frontline workers, WHO India may consider supporting national and state governments in developing a coherent roll-out strategy for capacity building of frontline workers. WHO India could also explore mechanisms to scale up training delivery without reducing the quality of the training, including use of knowledge assessments and refreshers. *"The challenge is – how to scale up NCD prevention and control trainings without dumbing it down!" Dr. Yogesh Jain, JSS* ii. **Mentoring system for frontline Health Workers:** WHO India could also consider supporting a review of the current capacity building and monitoring methods for ASHAs and ANMs. Respondents have reiterated that mentoring and hand holding may be equally important as trainings required to ensure that quality and morale of frontline health workers are sustained.
e. Greater focus on NCDs in Medical Curriculum	WHO India may explore working on enhancing Medical Curriculum with appropriate agencies to integrate NCDs (esp. preventive aspects) in a more forceful manner in the same. E-learning provides new formats for micro learning using videos, gamification, and could help to reach out to large number of audiences in a shorter time.
f. State Departments for IEC on NCDs	State Health IEC departments report a resource shortage in staff and skills to design targeted IEC tools on NCDs. WHO India could provide technical support GoI in building capacities of State Health IEC departments on NCDs.

C.7.4. Support and undertake advocacy in multiple areas on NCDs

In addition to the actors mentioned in section 7.1 above, following are additional potential target groups for future advocacy on NCDs which WHO India could explore:

Advocacy Target	Proposed Strategy for WHO India
a. Donors for greater funding to NCDs	The WHO Global Coordination Mechanism on the Prevention and Control of Non communicable Diseases, Copenhagen in April 2018 underlined that NCD financing need urgent attention. It pointed out that since public resources were insufficient to overcome the NCD challenge, private sector needed to be incentivised to support financing of national NCD responses with development assistance funding acting as a catalyst, esp. in in low-income countries. An important area for advocacy for WHO India is to work with donors and private sector to enhance the overall pool of funding for NCDs, including tapping the recent CSR Act in India and Innovation funds such as the India-Israel Global Innovation Challenge.[79]
b. Non-health Ministries in GoI and State Governments	Advocacy is needed with non-health ministries in GOI to convey the multidimensional nature of NCDs and to reinforce the roles of various ministries in tackling the same. This advocacy could be integrated into the ongoing support by WHO India and UNDP to enhance implementation of NMAP.
c. Elected representatives at national, state and Panchayat levels	Parliamentarians at national and state levels are critical for ensuring that NCD programmes have adequate budgets and infrastructure and are obvious targets for advocacy on NCDs. Additionally, elected representatives at Panchayat level are also critical in ensuring behaviour change among village communities to meet the rising NCD epidemic. Special modules may be needed for them.
d. NITI Aayog	WHO India is already working with NITI Aayog on Air pollution. Given NITI Aayog's interest in Health, WHO India could explore involving NITI Aayog for support in monitoring of NMAP implementation. This may enhance upward accountability to the multi-stakeholder mechanism and may facilitate faster implementation of the NMAP. NITI Aayog could also support setting up a structure like NDMA/ SDMA (for disaster management) for NCDs that provides CSOs and inter-agency groups working on the ground a platform for working on and monitoring NCDs.
e. Within United Nations	Given the epidemic proportion of NCDs, WHO India could consider advocating within the UN system to develop a UNAIDS kind of modality for NCDs. This may ensure better funding and coordination with multiple actors.

C.7.5. Explore areas for supporting further research on NCDs

Following are some suggestions from this evaluation on supporting research on NCDs which WHO India may like to explore:

Research areas	Details
a. Risk factors and NCD causality in low BMI, high physical activity, poor nutrition individuals	Respondents pointed out that the causation of NCD in poor under-nourished populations needs further research. Developing contextualised models for prevention of control of NCDs in such conditions is an important area of research that WHO India could consider.

b. Supporting GoI to assess efficacy of newly launched and existing programmes on health outcomes for NCDs	Various new initiatives have been taken by GOI and state governments on tackling NCDs, in addition to ongoing schemes and programmes, as discussed in this document. Evidence based research on the efficacy of these programmes is needed to identify the gaps and to tweak these programmes. WHO India could support GoI to set up a system to monitor and assess the efficacy of the programmes on achieving health outcomes on NCDs.
c. Research framework for utilising Population based Screening data for prioritisation	The Population based Screening (PBS) of NCDs has started generating a large amount of data on the prevalence of risk factors and NCDs from various states. This data can provide relevant learnings about the potential priorities areas in NCDs such as budget allocations and prioritisation of NCD wise facilities in various states and districts. WHO India may consider supporting GoI and the state departments in analysis of the PBS data and ensuring that the results are rapidly fed back to state and district level so that quick action is taken on the same. A system to analyse the data and disseminate could also be set up at regular intervals, e.g. on a quarterly basis. Data analysis methodologies are now available for predictive analysis of this data, which could help in planning NCD related interventions. This may also be considered by WHO India.
d. Screen WHO's global experience on NCDs for interventions that can be scaled up in India	Most respondents expect WHO India to harvest its international experiences on setting up multi stakeholder mechanisms on NCDs in other countries and regions, and to present the interventions most relevant to India to be adapted by the Indian health system. Coupled with innovations by CSOs, CSR organizations and state health departments, this could be a very useful repository of useful innovations and learnings to help develop rapidly scaling up successful and adaptable NCD interventions.
e. Explore the role of AYUSH for preventive health	The Prime Minister launched 10 AYUSH Health and Wellness Centres (AHWCs) in Haryana on Aug 30, 2019, in line with Ministry of AYUSH's commitment to make 12,500 AHWCs functional in next three years. WHO India may explore evidence based research on the efficacy and role of AYUSH for NCD prevention.

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